Utah Attorney General's Office
Memorandum

To: Utah Air Quality Board

From: Fred Nelson

Re: In the Matter of Sevier Power Company DAQE-AN2529001-04

Date: June 1, 2006

Attached are the post-hearing briefs of Sevier Citizens, the Executive Secretary, Sevier Power Company, and PacifiCorp. This matter is on the agenda for decision at the June 15, 2006 meeting. The Executive Secretary and Sevier Power Company also included proposed findings and conclusions for consideration by the Board.

Sevier County Citizens For Clean Air & Water, Inc.

Summation of Sevier Power Company Appeal

May 10, 2006

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BEFORE THE UTAH AIR QUALITY BOARD

Sevier County Citizens For Clean Air And Water, Inc.	* *	
Petitioner,	*	Summation of Air Quality
	*	Hearing on May 10, 2006
In the matter of Sevier Power	*	Held at Snow College in
Company:	*	Richfield, Utah
Case No. DAQE-AN2529001-04	*	

The Sevier County Citizens (SCC) hereby submits the following statements summarizing the hearing in the matter of Sevier Power Company, held in Richfield, Utah on May 10, 2006,

I, James Kennon, submit the following statement to support the testimony given at the above hearing.

The evidence presented stands on its own as it was direct evidence from a number of organizations and federal agencies that specialize in the claims we put forth. The comments made by Richard Long, on April 6, 2004, must be adhered to before the Permit for the Sevier Power Company can be considered as valid. The overlapping of ambient impacts is of serious concern as the evidence presented by SCC shows.The degradation of national parks as found in the National Park Service report, dated March, 2006 demonstrates and reaffirms the other evidence submitted to the Air Quality Board. The response by the National Park Service,

dated April, 2004 lends credence to our testimony that the modeling for the Class 1 areas was inadequate. That same document also states like the other evidence submitted, that SCR systems needs to be employed in the Sevier Power Company permit, as well as IGCC. The growth analysis was totally off the mark. Sevier County has experienced rapid growth in recent years and the discovery of oil in the last 3 years has spurred a real estate growth like nothing ever seen in our county. To use the census does not reflect future growth but indicates past growth. The oil discovery has been termed as the biggest in recent times in the United States. Investors have moved into the real estate market in our county. The P.M. 2.5 & P.M. 10 problem must be addressed. We have many miles of dirt roads that must be figured into any growth analysis. The number of small sources that are operating without a permit would have been easy to determine by checking the number of permits on file and then just checking a local phone book. This maybe a elementary way of doing it but it would be better then ignoring such things as gravel pits that cause problems. The CALMET error described by the Park Service must be revaluated using the CALPUFF modeling. The modeling shows many areas that are inconsistent with EPA guidance. Without some indication that the recommendations from the various agencies have been incorporated into the modeling, the Air Quality Board must declare the Sevier Power Company permit, illegal. The fact that only one gypsum plant was included in the modeling of the PSD Class II NO2 increment phase puts doubt on other aspects as well.

The National Park Service has stated that the focus on air quality is "PREVENTION", as it is in the U.S. Clean Air Act. Monitoring is the only way to determine if the air quality has improved or degraded in an area. The EPA also encourages states to prevent pollution and has programs to assist the states in this endeavor. EPA encourages states to adopt regulations more strict than federal regulations when it is found that is necessary to protect individual areas within their state. Utah law also allows that when necessary. I quote the Utah here as it is written.

19-2-106 **Rulemaking authority and procedure.**
(1)Except as provided in Subsection (2), no rule which the board makes for the purpose of administering a program under the federal Clean Air Act may be more stringent than the corresponding federal regulations which address the same circumstances. In making rules, the board may incorporate by reference corresponding federal regulations.
(2) The board may make rules more stringent than corresponding federal regulations for the purpose described in Subsection (1), only if it makes a written

finding after public comment and hearing and based on evidence in the record, that corresponding federal regulations are not adequate to protect public health and the environment of the state. Those findings shall be accompanied by an opinion referring to the evaluating the public health and environment information and studies contained in the record which will form the basis for the board's conclusions.

The question of IGCC is an area where there is little agreement on the subject. Those that oppose the concept like to use the argument that they do not want to be told they have to **consider** it. The truth of the matter is we are told every day how we are to behave. When we come upon a stop sign, we must stop or pay the penalty. There are signs along the road that tells the speed that we can travel. If we make a nuisance of ourself we are told we need stop it. To use the excuse that they do not want to be told they have to consider IGCC does not wash. They are already being told that they have to follow certain regulations. IGCC is no different than the other rules found in the Clean Air Act and the Utah Air Conservation Act. The EPA stated that NEVCO had to justify the reason for not considering IGCC. That should have been enough not to issue them a permit. The fact that Collin Campbell a witness for the Executive Secretary, stated in cross examination, that he had no formal education in the area, should lend credence to the fact the people such as ourselves can and do obtain enough information to testify in these areas.

The mere fact that the 100 foot tower was 2 miles from the site of the power plant should be enough to indicate that the information gained from that tower would not provide accurate information for modeling. When you check the WINDROSE modeling it shows the difference between the 10 meter and 100 meter level on the quarterly figures. With the tower close to the hills and mountains the wind flows will be totally different that those in the middle of the valley. In meetings with the Sevier County Planning Commission, Mr. Craig Cox (part owner in NEVCO) stated that the DAQ sited the tower and told them to move the site of the plant because of the wind currents against the hills. If that is so, why wasn't the tower also moved? I live in a high valley due south of the proposed plant and within less than 30 miles of the plant. The wind currents are nothing like shown in the modeling. With the narrow long valley and close proximity to high mountains, more that one tower is required to obtain accurate information. As a matter of fact, several towers would be called for in this case. When I first read the WINDROSE modeling, my first thought was where did they get their information. I held discussions with a very experienced meteorologist that retired from a federal agency. He lives in Richfield but was not willing to testify due to local politics. He stated that the only way to get accurate information

was to release radiosonde within Sevier Valley. Salt Lake and Grand Junction do not reflect the true information.

Claim numbers 9 and 10 were combined. **UDAQ did not require sufficient analysis of the impacts of the Sevier Power Company coal-fired power plant on soil, vegetation, wildlife, and animals.**

Noticeably missing from NEVCO's witness list was the company that conducted the soils, vegetation, wildlife, and animal portion of the NOI. It would have been interesting. One thing that needs to be looked at, is one year of data that was collected for some areas of the NOI, and little time was spent on these issues. UDAQ is mandated to collect data on all areas of the Clean Air Act and the Utah Conservation Act sufficient to reflect the true impact on the area. The mere fact that Section 112-7 of the Clean Air Act was not adhered to is sufficient to determine that the permit is illegal. That section requires the DAQ to protect endangered and threatened species. SSC provided photo's of bald eagle on the very property of the proposed plant site. Whooping Cranes, ducks, geese, and many others can be found in the area. Testing for mercury has not been conducted in Sevier Valley. Due to this the UDAQ can not determine the impact on the citizens or on the many animals and fish in the area.

The issue of selenium,and nitrogen saturation must be investigated before this permit moves forward. Researchers from the US Geological Survey and the National Park Service have studied the affects of pollution on the Rocky Mountain National Park for twenty years. They have determined that the pollution in the Park comes not only from the area around the Park but from states nearby as well. The facts they have found are; nitrogen concentration in the Park's rain and snow has been increasing. There is more nitrogen deposited in high elevation ecosystems at the Park than plants can use, and excess nitrogen is leaking into park lakes and streams at certain times of the year. The chemical changes are occurring in surface waters, soils, and trees on the east side of the Park. The NOI submitted by NEVCO, states that there are no long term studies on the impact of these elements. They should look further. Selenium damage occurs over long periods of time and to model it over a short period of time does not produce scientific data. As testified to during the hearing, Utah reported one incident of selenium damage in 1988. The Utah Health Department issued a health advisory to protect the public. Steps had to then be taken to mitigate the problem which can be very costly. In May of 2001. Jill S. Baron of the US Geological Survey, gave testimony before the House Committee On Science. She and her colleagues had spent over 20 years studying the influences of atmospheric deposition on natural environments. They discovered several things, but a very important observation was noted. That being that long term monitoring is badly needed, but due to the

complex topography modeling is difficult. In a June, 2003 publication, titled, "Air Pollution Related Lichen Monitoring in National Parks, Forests and Refuges," it describes the process land managers are to use in considering PSD applications. It also states,"predictive requirement presents a challenge because no models are available that quantitatively predict changes in air chemistry." It states that lichens are valuable sources of forage, shelter, and nesting material for mammals, birds, and invertebrates. Air pollution is one of many potential stressors that can affect lichen health. Pollution concentration estimated from passive monitors (including lichens) are not usually thought to be of high value by **Air Regulators.**"

Claim 11 deals with **health**. This subject is very important to the citizens of Sevier County. As a reminder, Utah Code 19-2-106 does allow for stricter regulations when justified. With 183 homes within 1 3/4 miles of the proposed site, this would certainly call for stricter requirements. With such a small valley the rest of the citizens of the county will also feel the effects. To quote from a May 12, 2006, press release from the EPA. In an effort to understand why some people are more susceptible to the affects of environmental contaminants than others; Dr. George Gray, EPA's assistant administrator for the Office of Research and Development, said,"We know that environmental contaminants have different effects on people, due to inherited traits, lifestyles and genetic makeup, the environment and disease." We are all aware of the thresholds that EPA has set for the different problems caused by pollution. How many are aware of how theycame up with these thresholds? Let us look at one that I researched. "The current U.S. EPA reference dose (RfD) for methlmercury is based on neurological effects witnessed in 81 Iraqi children whose mothers had methlmercury-contaminated bread during pregnancy and breast feed their babies." Does this sound like the kind of study you would rely on to protect **YOUR FAMILY?** On March 15, 2005, Acting Administrator Steve Johnson, stated, "Airborne mercury knows no boundaries: it is a global problem." Sevier Power Company has informed the citizens of Sevier County that the mercury will concentrate at a level of 900 feet above the base of the stack. If this is so, it will then leach into the ground water in the form of rain or snow. The State of Utah in a report on water in the Sigurd-Sevier area, found that the ground water in the aquifer is replenished by the flood irrigation that takes place on the valley floor and from the rain and snow draining from the foot hills and seeping into the aquifer. This would also bring mercury into the ponds and ditches that migratory birds use to feed and raise their young. A Harvard University study, paid for by EPA, co-authored by an EPA scientist estimated health benefits 100 times greater than the EPA did, but top officials ordered the findings stripped from public documents. An EPA staff member acknowledged the Harvard study would have forced the agency to consider more

stringent controls. The Harvard study concluded that **$ 5 billion** a year would be saved due to reduced neurological and cardiac harm. If you are not aware of it, a number of states are taking legal action against the EPA for this striking of the study. Utah Section 26-1-30, that describes the relationship between the Health Department and the Department of Environmental Quality needs to be reaffirmed. In July, 2004 press release, Administrator, Mike Leavitt announced, "An important component of the strategy is to improve our understanding of the health risks from long-term exposure to particulate pollution, particularly as it relates to heart disease, the leading cause of death in our country" In a press release dated May 2005, The National Institute of Environmental Health Services reported that, "People with Diabetes may be at higher risk for cardiovascular problems when air pollution levels are higher, according to a new study of Boston area residents." This information indicates that there is much reason to believe that the thresholds are always changing and are open to doubt.

In a Utah State Summary of Emissions, dated 1999, that I found on the UDAQ web site, a couple of things stood out for me. The reason I quote 1999, is because that was the last year posted on your web site. But if you look at that data, you will find the following.

For CO emissions -----Sevier County–23,358.16 tons/year
Emery County–16,282.70 tons/year
For PM 10 emissions-Sevier County—2,230 tons/year
Emery County—3,519.31 tons/year
For VOC emissions—Sevier County—42,801.83tons/year
Emery County—20,289----tons/year
Millard County–29,708-----tons/year

In 2001,about 5% of Utahans were under care for asthma (Utah Health Status Survey, 2001). It is estimated that about 118,400 Utahans have asthma, which includes 36,000 children under age 18. Some 1,400 persons were hospitalized because of asthma during 2001, with the a cost of $ 7.8 million . Efforts toward prevention and control of environmental risk factors must focus on reducing indoor and outdoor pollution. Natural and man-made environmental factors such as nitrogen dioxide, sulfur dioxide, particulate matter and ozone also play an important role in asthma. The Utah Task Force states that they will, identify geographical areas within the state that are elevated risks for asthma and associated allergic respiratory diseases due to air emissions, air inversions and other conditions. Their outcome is to, "Decrease air emissions and outdoor pollutants." I wonder if this goal has been accomplished? Many people that are exceptionally sensitive to the effects of pollution have moved to Sevier County to find a quality of life that they no longer could find in northern Utah and other areas of the west.

This means we have a higher population of people that feel the effects of low levels of pollution. This fact would call for another look at the health thresholds that are now under study by the EPA.

Claim # 12 is asking you to consider the impact on property valves and additional medical expenses. The Utah Air Conservation Act and the U.S. Clean Air Act both require that these be considered. From the Washington State Air Quality plan, it states. "As traffic volumes increase, the safety of our streets declines along with property valves, air quality, and the quite we enjoy in our homes. Traffic noise can have a significant effect on property value. A home located adjacent to a major highway may sell for 8% to 10% less when compared to one located along a quite neighborhood street." If that is the case, what would be the drop in valve to a home next to a power plant running 24 hours a day?

Claim # 13 can be summed up by looking at the 2006, Performance Partnership Agreement that states the PM 10 problem in Sevier County will be corrected. How can you correct it when you add to the problem by permitting a coal-fired power plant. It also makes clear that Sevier County and surrounding areas have a problem with visibility. Just as we have contended all along, the National Park Service has also expressed concern about these issues. The growth that Sevier County has experienced will only add to the already problems of air quality intrusion into our valley.

Claim # 14 is questioning the "downwash" modeling. The witness for NEVCO stated that the building for the coal pile was remodeled and their was no change. He used a 30 foot tall building to remodel. You do not have to run a model to know that a building 50 feet high and covering 5 acres will have an impact on air currents. This building will be larger than half of all the buildings modeled.

For the above reasons the Sevier Power Company Permit should be ruled illegal.

Respectfully,

James O. Kennon

James O. Kennon

The following statement was submitted by Scott Chamberland, witness at the hearing.

Selenium

The soils in the Sevier Valley favor mobile types of selenium that can be taken up by plants and/or leach into water. Of the soils surveyed in Sevier County, 84.1% of the soil families have optimum pH levels (pH 7.5-8.5) for mobile forms of selenium. Most of the soils are well oxidized and have low organic content, which also favor mobile or aids in the mobility of selenium (ASTRD, page 244 & 245). Sevier Valley may already have selenium problems. Dr. Duane Utley, DMV, of the Sevier Valley Animal Clinic has reported selenium toxicity cases from Sevier County. Species of plants which will only grow in selenium rich soils, such as *Stanleya pinnata,* are found soils around some sedimentary rock outcroppings along the foothills of the valley. These rock outcroppings will make up a portion of the parent material from which the valleys soils were made. My own garden soil tested at o.79 mg se/kg soil. This is more than double the 0.30 mg se/kg average for soils, but still in the normal range of 0.10 to 0.90 mg se/kg soil. In aquatic systems, selenium is bio-accumulated in aquatic organisms, from algae to fish. There is even evidence that selenium may bio-magnified in aquatic organisms under natural conditions (ASTRD, page 244 & 245).

Adding extra selenium to the soils could possibly present a threat to the health of the area. Dr, Packhams toxicology report presented May 10, 2006, addresses only inhalation of selenium from air borne se compounds. It does not address the deposition of these compounds, nor does it address how these compounds accumulate. Using the amount of selenium in the air of 1.49E-05 mg se/m3 air (DR. Packham reported 24-hour modeled max for selenium in the air) and having the selenium precipitate from only the 100 meters closest to the ground there would be 1.49E-03 mg se/m2 deposited daily and 0.544mg se/m2 (2,200 mg se/acre) annually. This half a milligram of selenium per square meter could possibly be available for plant take up and ingestion by animals or humans. The deposition of selenium needs to be investigated further.

The Sevier County Citizens For Clean Air And Water, Inc., hereby request the Utah Air Quality Board to declare the Sevier Power Company permit illegal.

The following statements were submitted by Dick Cumisky, member of the Board of Directors for the Sevier County Citizens For Clean Air And Water, Inc.

Let us begin with the Constitution of the United States of America. The Preamble of this great document was written by the men who painstakingly drafted one of the most memorable outlines for civilization and government – one that has withstood over two centuries of unparalleled change.

"We the people of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America."

. The Congress of the United States saw fit draft "The Clean Air Act." As with our own U.S. Constitution – there was written a "preamble."

(b) The purposes of this title are -
(1) to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population;
(2) to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution;

The state of Utah drafted its own "Air Conservation Act" to follow through with the mandate of Congress.

19-2-101. Short title -- Policy of state and purpose of chapter -- Support of local and regional programs -- Provision of coordinated statewide program.
(1) This chapter is known as the "Air Conservation Act."
(2) It is the policy of this state and the purpose of this chapter to achieve and maintain levels of air quality which will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state.

3. UDAQ failed to adequately consider the use of IGCC both as a viable method of achieving BACT and as a cost effective way to minimize emissions.

The Utah State Implementation Plan, Section VIII, page 2 states "Utah regulation require all new and modified sources in PSD areas to use the **Best Available Control Technology** (BACT) which would yield the highest air cleaning efficiencies and the lowest pollution discharges in an effort to save the air resource for future use and protect the national treasures such as our National Parks through planning designed to best benefit the state."

We are here to prove that CFB, as approved, does not meet the requirements of BACT.

On June 10, 2005 the Executive Secretary's Response to our appeal was: "Consistent with applicable laws and regulations, UDAQ did not require consideration of ...(IGCC) for the proposed SPC plant processes. Still, SPC provided and analysis, which UDAQ reviewed. IGCC is not yet as cost effective or available for the SPC plant processes and the BACT approved for the SPC is lawful and appropriate."

On March 20, 2006 The Executive Secretary submitted the following comments to Sevier Citizens initial pleading:

"While SCC correctly observes that the process for permit consideration is one of electrical generation, let us not forget that the purpose of (BACT) analysis is not to pre-determine the installation's process but to determine an *emission limitation* based on the applicant's selected process This determination can only take place *after* the source selects the process . . .

The Executive Secretary completely misses the point.

Please refer to EPA 40 CFR, subpart 1, part C, section 169 "Definitions:"

> (3) The term "Best Available Control Technology" means an emission limitation based on the **maximum** degree of reduction of each pollutant subject to regulation under this Act emitted from or which results from any major emitting **facility,** which the permitting authority, on a case -by -case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such **facility** through application of **production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. . .**

Since the SPC proposed project would be a major emitter of regulated pollutants, it is subject to **New Source Review**

The Utah DEQ R 307-101 definition of **"source"** reads:

"Source" means any structure, **building, facility, or installation** which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons under common control. A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping.

The EPA definition clearly states it is the **facility** that is evaluated including any **"methods, systems and techniques" used within that facility."** This is a major oversight on the part of the Executive Secretary and the Approval Order should be returned to the Division for a proper study. In addition to EPA's requirements, the Utah Code Section 19-2-102 "Definitions", states:

> (10)(a) "facility" means machinery, equipment, structures, or any part or accessories of them, installed or acquired for the primary purpose of controlling or disposing of air pollution.

The **process** is one of electrical generation. The regulated pollutants must be reduced to the lowest level achievable per both state and federal regulations.

From the **Gasification Technologies Conference,** Washington, DC, October 2004 (documents submitted during the Discovery Process, November 2005)

> **Gasification Offers Significant Environmental and Economic Benefits.**
>
> "When linked with modern combined cycle turbines, gasification is one of the most efficient, environmentally effective means of producing electricity from solid or liquid feedstocks.
>
> Air Emissions from an Integrated Gasification combined Cycle (IGCC) are far below U.S. Clean Air Act standards. Sulfur removal efficiencies of more than 99% are achievable. Reductions of emissions of SO_2, NOx, CO and particulates from an IGCC plant are significantly better than those achieved by scrubber-equipped, as well as Circulating Fluidized Bed Combustion (CFBC) plants on a fuel-by-fuel basis.
>
> As air emissions standards become more strict, the superior environmental performance of IGCC will take on added economic benefits because the technology can achieve greater emissions reductions at lower cost than less advanced technologies."

There is enough evidence provided by the U.S. Department of Energy, Office of Fossil Energy (evidence submitted during discovery) to determine the costs of this equipment is only slightly higher than for CFB systems and could even be lower once marketable byproducts are deducted.. Several reputable companies are offering "turn-key" project development. Those include General Electric, Bechtel, Westinghouse, Shell Oil and Conoco-Phillips.

There is more evidence that IGCC offers significant advantages in achieving BACT. I refer to a paper entitled "An Environmental Assessment of IGCC Power Systems" by Gary Stiegel of the U.S. DOE/National Energy Technology Laboratory, presented at the Nineteenth Annual Pittsburg Coal Conference, September 23-27, 2002.

"Comparison to IGCC with PC-fired and FBC Power Plants

"Most of the trace metals either remain with the slag/bottom ash or are removed from the syngas prior in downstream process equipment. The trace metals of greatest environmental concern are reported to be arsenic, boron, cadmium, **mercury and selenium**.... "

"Compared with combustion systems, IGCC has a major advantage when it comes to mercury control. Commercial methods have been employed for many years that remove trace amounts of mercury from natural gas and gasifier syngas. Thus, mercury emissions control from IGCC technology is more of an economic issue than a technical one."

.However, as discussed previously, the high pressure and high CO_2 concentration of IGCC's synfuel provides optimum conditions for CO_2 removal prior to combustion, if required. This capability has the potential to further set IGCC apart from other coal-fueled power generation technologies, and would go a long way toward eliminating its contribution to possible global climate change. (Since the SPC plant may have a useful life exceeding 40 years, this is something to consider).

In a letter from the EPA, Region 8, dated April 6, 2004, Richard R. Long, Director questions the Executive Secretary:

1. **Statement that IGCC is too costly should be quantified.** Page 35 of the State's engineering analysis says that one of the ways to achieve a (BACT) level of emission control is by good process design. . .

Please keep in mind that we are discussing a proposed coal-fired power plant which could be constructed within 1.75 miles of a community with 183 residences.

The evidence cited above clearly indicates that the Executive Secretary erred in determining that a circulating, fluidized bed combustor system met the requirements of BACT. It is clear from the rules issued by both the EPA and the State of Utah, DEQ that the definitions of **facility** and **source** were misconstrued and mis-applied to the SPC project.

The **Approval Order** dated October 12, 2004. should be **rescinded and remanded** to the Division for further study and evaluation.

4. **UDAQ failed to determine that the ambient air within the Sevier Valley airshed is in compliance with the Clean Air Act and, in fact, has no base line data with which to evaluate the additions requested by SPC.**

In a one line statement from SPC's Notice of Intent (NOI), section 6.1.2, it says "Sigurd (Town) where the proposed facility will be located, is in attainment for all pollutants." There is no evidence to support this conclusion. Was it decided, perhaps, that the area is "in attainment" solely because there is no data available?

5. **UDAQ failed to model the airflows and currents as they actually exist within the enclosed Sevier Valley, but rather assumed uniform distribution of emissions from the proposed SPC plant.**

6. **Maximum predicted concentrations of PM_{10} in areas where the applicant has significant impact would occur along the eastern edge of the site's proposed boundary, and is the result of coal handling processes at the plant.**

The Executive Secretary states in his response dated June 10, 2005 that "Data from the collection tower was used in the **model** together with the local terrain through the use of topographic maps, distance calculations, and elevation numbers. . . ."

Has anyone ever proofed out one of these models on the ground to verify their accuracy? Verifying these models on the ground is the only way to develop confidence

in their accuracy. It is probably fair to compare this to our daily weather forecasts. What is their accuracy rate? These weather forecasts are based upon air flows somewhat higher aloft than the flows we are trying to model for this SPC plant. The Executive Secretary again states in his response of June 10 "Upper air data has little variability over a distance as short as 125 miles . . ." I do not agree with that statement, nor, apparently does Tom Orth, UDAQ-NSR Modeler who states in a letter dated May 2, 2006 "The Salt Lake City radiosonde data meets DAQ requirements for atmospheric stability analysis in the Salt Lake Valley only. At any given time, other locations in the state can have a vertical stability profile significantly different from what is measured in Salt Lake City." Not having good data from numerous sources helps explain why our weather forecasts have numerous inaccuracies for our rural areas. If a weather forecast (which is a broad area **model**) can't "get it right" because of insufficient data collection in our rural area, how is a **model**, designed to predict air pollution, going to **get it right** in our small, highly complex valley?

Modeling is even more important in this case because of the proximity of those **183 homes within 1-3/4 miles**. One small error could be catastrophic to those residents. Please show me your verifications of this modeling.

The AO should be returned to the applicant or department for proper completion.

8. **The AO for SPC would permit the use of dry baghouse filters only for removal of the pollutants produced by the combustion operation. Many authorities cite the superior value of water scrubbers for achieving MACT of those pollutants. I find no reference to the study of this process for inclusion in the NOI for SPC.**

Here we again find ourselves investigating the merits of IGCC as opposed to CFB combustion techniques. I refer to a paper entitled "An Environmental Assessment of IGCC Power Systems" by Gary Stiegel of the U.S. DOE/National energy Technology Laboratory, presented at the Nineteenth Annual Pittsburg Coal Conference, September 23-27, 2002.

"Comparison to IGCC with PC-fired and FBC Power Plants

"In order to put the IGCC's overall environmental assessment into proper perspective, it is appropriate to compare it with a modern, circulating fluidized bed power plant.

From SPC's NOI, sec. 5.3.3, SCR was chosen over SCNR as a pollution control technology because of cost. SNCR was eliminated because it was not considered "technologically feasible." Water scrubbers were not even discussed. This does not qualify as "top-down" technology review.

. On an output basis, IGCC will consume roughly 30 – 60% less water than that produced by the PC plant and 63% less water than the competing technologies, which gives it more siting and permitting flexibility."

I believe it is both possible and practical to consider the use of both systems, in combination, for maximum reduction of the pollutants.

12. UDAQ failed to consider the financial impact of the property values, job loss and additional medical expenses that the people of Sevier County will suffer from the AO of the Sevier Power Company permit.

As stated in the Utah Clean Air Act, one of the obligations is to protect the health and welfare of the citizens. The word we are questioning here is "welfare". I refer to the U.S. Clean Air Act to help clarify the meaning of "welfare."

(b) The purposes of this title are -
(1) to protect and enhance the quality of the Nation's air resources so as to promote the public **health and welfare** and the productive capacity of its population;

Welfare is defined as "the well being" and "health, happiness and prosperity." This definition is taken from the dictionary and from the word as used in the U.S. Constitution.

Sec. 160. The purposes of this part are as follows:
(1) to protect public **health and welfare** from any actual or potential adverse effect which in the Administrator's judgment may reasonably be anticipated to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air), notwithstanding attainment and maintenance of all national ambient air quality standards;
[42 U.S.C. 7470]

12. UDAQ failed to consider the financial impact of the property values, job loss and additional medical expenses that the people of Sevier County will suffer from the AO of the Sevier Power Company permit.

As stated in the Utah Clean Air Act, one of the obligations is to protect the health and welfare of the citizens." Health and welfare" means many things to many people. Both the EPA and Utah's Clean Air Act refer several times to "health" in setting air quality standards that are at last **designed** to protect the health of normal people.
The word we are questioning here is **"welfare"**. I refer to the U.S. Clean Air Act to help clarify the meaning of **"welfare"**

(b) The purposes of this title are -
(1) to protect and enhance the quality of the Nation's air resources so as to promote the **public health and welfare** and the productive capacity of its population;

Welfare is further defined as "the well being" and "health, happiness and prosperity" as taken from the dictionary and from the word as used in the U.S. Constitution (as taken from the U.S. Constitution website).

Sec. 160. The purposes of this part are as follows:
(1) to protect public health and welfare from any actual or potential adverse effect which in the Administrator's judgment

may reasonably be anticipate to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air), notwithstanding attainment and maintenance of all national ambient air quality standards;
[42 U.S.C. 7470]

The Utah Air Conservation Act states:

19-2-101. Short title -- Policy of state and purpose of chapter -- Support of local and regional programs -- Provision of coordinated statewide program.
(1) This chapter is known as the "Air Conservation Act."
(2) It is the policy of this state and the purpose of this chapter to achieve and maintain levels of air quality which will protect human **health and safety**, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state.

Once again we are talking about 183 homes within 1-3/4 miles of the proposed power plant. These are not homes that were purchased or built after the announcement of the proposed plant. These are homes that have been in the possession of families for several generations. These owners are not so naïve as to believe that nothing would ever change or that there might someday be and industrial park within that distance. Never in their wildest dreams did they ever suspect something the size and magnitude of a power plant.

There will obviously be health issues that develop from exposure to the pollutants being emitted so close to their homes and I believe these issues were covered adequately before.

The preambles to both the U.S. and Utah Codes both state that the intent of the rules and regulations governing air pollution is to **protect the health and welfare** of the citizens. Were this plant located in a remote area, we would not be having this discussion but it is being sited right adjacent to a residential area and that requires a bit more stringent interpretation of the laws than it would if located in a remote location.

SCC requests that the Approval Order be rescinded and sent back to the Division for further study. The health and welfare of the citizens of Sevier County is of paramount consideration.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing summation of the Air Quality Board hearing, held in Richfield, Utah, was served on the below persons on this 22nd day of May, 2006 by U.S. Mail and or UPS delivery, postage paid.

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BEFORE THE UTAH AIR QUALITY BOARD

In the Matter of: Sevier Power Company Power Plant Sevier County, Utah DAQE-AN2529001-04	EXECUTIVE SECRETARY'S POST-HEARING BRIEF

COMES NOW the Executive Secretary of the Utah Air Quality Board ("Executive Secretary") and submits this POST-HEARING BRIEF pertaining to the Request for Agency Action filed by Sevier County Citizens for Clean Air and Water ("Petitioner"), pursuant to Utah Admin. Code R307-103-7(6)(b). The Executive Secretary has also prepared proposed Findings of Fact and Conclusions of Law, submitted simultaneously with this brief. At issue in this proceeding is whether the Executive Secretary conducted the proper regulatory review in issuing an Approval Order to Sevier Power Company ("SPC") to construct and operate a coal-fired power plant in Sevier County, Utah. Based on the evidence presented, Petitioner has failed to demonstrate that the Executive Secretary erred in the issuance of the Approval Order.

I. INTRODUCTION

On October 12, 2004, the Executive Secretary signed an Approval Order permitting Sevier Power Company to construct and operate a coal-fired power plant in Sevier County, Utah.

On November 1, 2004, Sevier County Citizens filed a Request for Agency Action ("RFA") appealing the Approval Order. Sevier County Citizens filed another document on March 16, 2005, attempting to set forth more specific reasons for the group's challenge. At the April 13, 2005 Board meeting, the Board granted intervention to Petitioner and denied intervention to Sierra Club and PacifiCorp. However, the Board granted amicus status to both the Sierra Club and PacifiCorp.[1]

The parties engaged in discovery according to schedules submitted to and approved by the Board, concluding on January 30, 2006. On February 27, 2006, the Executive Secretary filed pre-hearing motions to dismiss the four generalized allegations in Petitioner's November 1, 2004 RFA and for judgment on the pleadings. The Board heard arguments on the motions at an April 6, 2006 hearing. At the hearing, the parties stipulated that if Petitioner agreed not to pursue the allegations contained in the November 1, 2004 RFA, the Executive Secretary would withdraw the motion to dismiss.

With respect to the motion for judgment on the pleadings, the Board dismissed claims 2, 6, and 10 of Petitioner's March 16, 2005 RFA. Accordingly, the Executive Secretary does not address those claims in this brief. The Board deferred judgment on claims 1, 3, 7, and 11-13 until after the hearing, instead opting to take evidence on questions of fact regarding issues raised in the motion, and to hear both factual and legal arguments on the other claims where a genuine issue of material fact remained. The Board also reiterated that the hearing would be limited to the Board's authority to determine whether the Executive Secretary followed the existing rules of the Utah Air Quality Board in issuing the Approval Order, and not to determine whether the existing rules should be modified. As a related matter, through a March 13, 2006 letter to the

[1] April 13, 2005 Air Quality Board Meeting at Tr. 41; Order Re: Petitions to Intervene, In the Matter of Sevier Power Company Power Plant.

Board and by oral testimony at the April 6, 2006 hearing, Sierra Club withdrew from all participation as amicus.[2] Sierra Club renewed a request that the Board stay its proceedings until after the Utah Supreme Court decided an appeal of the Board's previous denial of standing to Sierra Club. The Board denied the request.[3]

The Board presided over a hearing on the merits held in Richfield on May 10, 2006. The Executive Secretary, Sevier Power Company, and Sevier County Citizens called witnesses and presented evidence. As presented, Petitioner demonstrated that its grievance lay not with whether the Executive Secretary complied with the Utah Air Rules, but with the adequacy of the rules themselves. As a result, Petitioner failed to show that the Executive Secretary erred, and the Executive Secretary respectfully requests that the Air Quality Board affirm in its entirety the decision to issue the Approval Order.

II. BURDEN OF PROOF

The Board has a two-fold responsibility at a hearing on the merits: (1) to determine the facts; and (2) to apply the law to those facts. It now rests upon the Board to affirm, remand, or rescind the Approval Order. As the Board sits in this adjudicatory capacity, it must weigh testimony and evidence submitted by the parties. The Petitioner carriers the burden of proof in this administrative hearing, and the Utah Supreme Court has stated that absent a statute or rule mandating a higher standard, ". . . . the proper standard of proof in the administrative context is generally the 'preponderance of the evidence' standard." Harken Southwest Corp. v. Board of Oil, Gas and Mining, 920 P.2d 1176, 1182 (Utah 1996). Furthermore, Petitioner must overcome the presumption of regularity which accompanies the actions of an administrative agency, which means that the Executive Secretary's "actions [are] endowed with a presumption of correctness

[2] March 13, 2006 letter from Western Resource Advocates to the Air Quality Board.
[3] April 6, 2006 Air Quality Board Meeting at Tr.18.

and validity." Cottonwood Heights Citizens Ass'n. v. Board of Commissioners of Salt Lake County, 593 P.2d 138, 140 (Utah 1979).

III. ARGUMENT

A. Petitioner's case was based almost solely on hearsay

To the extent that Petitioner's presentation of evidence consisted of a recitation of information provided by third party sources, such evidence is hearsay. Hearsay is "a statement, other than one made by the declarant while testifying at trial or hearing, offered in evidence to prove the truth of the matter asserted." Utah R. Evid. 801. Although the Utah Administrative Procedures Act does not allow evidence to be excluded solely because it is hearsay, Utah Code Ann. § 63-46b-8(c), neither may a contested finding of fact be based solely on hearsay evidence unless that evidence is admissible under the Utah Rules of Evidence. Utah Code Ann. § 63-46b-10(3).

For hearsay to be admissible under the Utah Rules of Evidence it must fall within one of the exceptions set forth in Utah Rule of Evidence 803. The only exception that could even conceivably apply to Petitioner's evidence may be the learned treatise exception. Utah R. Evid. 803(18). However, that exception applies to expert testimony and to facts where the Board could take judicial notice. Id. In this case, Petitioner presented no expert witnesses, nor did the Board take judicial notice of any facts. A judicially noticed fact must be one not subject to reasonable dispute in that it is either (1) generally known within the territorial jurisdiction of the trial court or (2) capable of accurate and ready determination by resort to those sources whose accuracy cannot reasonably be questioned. Utah R. Evid. 201. Therefore, to the extent that a finding of fact would be based solely on hearsay, such finding of fact would be improper.

B. Petitioner failed to show that the Executive Secretary erred

The Executive Secretary addresses the remaining claims below, following the order in which the claims appeared in Sevier County Citizen's RFA:

> **Petitioner Claim 1: UDAQ failed to evaluate the combined emissions of the three proposed coal-fired power plants currently under application in the state of Utah and the effects it would have upon the nearby National Parks.**

Utah Admin. Code R307-405-6(2) requires that the Executive Secretary "shall take into account all allowable emissions of ***approved*** sources or modifications whether constructed or not, and, to the extent practicable, the cumulative effect on air quality of all sources and growth in the affected area" (emphasis added). Petitioner's claim specifically referred to the Hunter 4 and Intermountain Power Project ("IPP") proposed expansions. As a matter of law, Sevier Power was not required to evaluate sources not then approved. Id. However, the modeling did include every approved source in that region, even into Carbon County and the IPP facility.

The modeling demonstrated that the SPC project did not have a significant impact in any of the Class I areas. Because the Class I Significant Impact Level ("SIL") was not exceeded, no additional evaluation was necessary to satisfy the Class I increment modeling requirements. While modeling showed an exceedance at Capitol Reef National Park from two nearby gypsum plants, the Executive Secretary determined that projected emissions from the source applicant did not contribute to that exceedance, and the UDAQ is currently working with those sources to resolve the modeled exceedance.

In support of its position that the Executive Secretary should have evaluated unapproved sources, Petitioner pointed to an April 12, 2004 letter from the National Park Service ("NPS"). However, Petitioner failed to rebut the Executive Secretary's evidence that UDAQ staff followed up with NPS to ensure that NPS had all relevant information regarding the analysis, whereupon NPS expressed no further concerns.

Because Petitioner has not shown that the Executive Secretary erred, the Board should deny Petitioner relief on this claim.

Petitioner Claim 3: UDAQ failed to adequately consider the use of IGCC both as a viable method of achieving BACT and as a cost effective way to minimize emissions.

Under the NSR Prevention of Significant Deterioration ("PSD") requirements, a proposed facility must employ "best available control technology" ("BACT") for each pollutant emitted. 42 U.S.C. § 7475(a)(4); Utah Admin. Code R307-401-6(1). The source submitted a complete top-down BACT review as part of the Notice of Intent ("NOI"). Consistent with EPA policy and with the conclusions of nearly every other state to have considered the issue, the Executive Secretary did not require the source applicant to consider Integrated Gasification Combined Cycle (IGCC) as part of the BACT review.

To ensure that the BACT analysis was correctly applied in the review process, the Executive Secretary hired Colin Campbell, whom the Executive Secretary considered to be among the preeminent experts in the field of NSR permitting, to act as a consultant. Mr. Campbell also testified at the hearing. Specifically, Mr. Campbell testified that this issue had been discussed at length in training provided for the UDAQ staff, and that the staff was aware of his interpretation and opinion that IGCC is not a required control option for consideration in the federal BACT program because IGCC would fundamentally redefine the design of a source where the applicant proposes to generate electricity from coal using a circulating fluidized bed process. *See* May Tr. 45-49. When asked whether there were any other reasons why the UDAQ's decision with regard to IGCC did not concern him, he pointed to the language in the regulations, and that in his opinion, IGCC is not an inherently lower emitting process than a circulating fluidized bed; and that although the IGCC technologies or group of technologies have great long term promise to be a very clean process, without the application of many ancillary

cleaning systems, IGCC is not inherently less emitting. *See* May Tr 49-50. For its part, Petitioner attempted to oversimplify the BACT analysis by shifting the focus away from control technology and toward the underlying process for electrical generation, regardless of how the underlying process functions.

To bolster its argument that the Executive Secretary erred in not requiring the source to consider IGCC in its BACT analysis, Petitioner pointed to an April 6, 2004 EPA Region 8 comment letter, as well as an April 12, 2004 National Park Service comment letter. A cursory consideration of EPA's letter could suggest inconsistency in its position on this issue. However, the context of the comment suggests that the EPA was unclear as to why the engineering analysis briefly mentioned IGCC. If in fact IGCC was mentioned as part of the source's BACT analysis, then EPA recommended that "some quantification of cost be provided to support the statement that IGCC is too costly." *See* Exhibit L. Although SPC did consider IGCC upon the UDAQ's suggestion, such evaluation was not part of the BACT analysis.

With respect to the letter from the National Park Service, the NPS was simply encouraging the Executive Secretary to require consideration of IGCC on the premise that a permitting authority has the discretion to engage in a broader analysis if it so desires. *See* Exhibit F. Neither EPA nor NPS suggests in its correspondence that consideration of IGCC is required as part of the BACT analysis. In response to a question by the Board as to the current number of operational IGGC plants, Mr. Campbell testified that only two operating IGCC facilities exist in the United States. Tr. 58-59. Mr. Campbell further testified that of those states that have required consideration of IGCC as part of a BACT analysis, none have required implementation of IGCC technology. Tr. 64-65.

Petitioner argued that the Executive Secretary should have followed the example of Illinois, Montana,[4] and New Mexico and exercised regulatory discretion to require the source to consider IGCC as an alternate process. The Executive Secretary did not choose to do so. Nor does he consider such to be a proper application of the BACT requirements.

Petitioner has not shown how the Executive Secretary erred. Consequently, the Board should deny Petitioner relief on this claim.

Petitioner Claim 4: UDAQ failed to determine that the ambient air within the Sevier Valley airshed is in compliance with the Clean Air Act and, in fact, has no base line data with which to evaluate the additions requested by SPC.

The permit record and testimony offered by the UDAQ modeling staff show that SPC installed an ambient monitor for PM_{10}. The Executive Secretary reviewed the data derived from the monitor and determined that the area is in attainment and complies with the Clean Air Act and the Utah Air Conservation Act. UDAQ staff further testified that the additional emission sources listed in this section of Petitioner's allegation were accounted for through various means consistent with EPA guidelines, and that the Executive Secretary followed EPA's Guideline to Air Quality Models and all PSD rules with respect to the requirements included in the modeling analysis.

Petitioner failed to offer any meaningful testimony or other evidence with regard to the modeling's alleged shortcomings and even claimed to not understand the modeling. Because Petitioner has not shown how the modeling was invalid and how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

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[4] In light of a re-affirmation of EPA policy considerations as outlined in a December 13, 2005 letter from EPA's Office of Air Quality, Planning, and Standards, Montana has determined in an engineering review that consideration of IGCC in the context of a BACT analysis constitutes redefining the source and is inappropriate. *See* Permit Analysis: Southern Montana Electric Generation and Transmission Cooperative - Highwood Generating Station, Permit #3423-00, March 30, 2006, at 10-11. Thus, of the states to have considered the issue, Illinois and New Mexico are the only two states that have decided to exercise so-called regulatory discretion and require consideration of IGCC as part of an applicant's BACT analysis.

Petitioner Claim 5: UDAQ failed to model the air flows and currents as they actually exist within the enclosed Sevier Valley, but rather assumed uniform distribution of emissions from the proposed SPC plant.

SPC erected a 100-meter meteorological data collection tower in the area of the proposed plant (approximately one mile away) so as to obtain wind data as would be experienced by actual emissions. Tom Orth, the near-field modeler for the UDAQ, testified that the Executive Secretary reviewed and approved the tower site location as being representative of weather conditions at the plant site.

Mr. Orth further testified that the model used the data from the collection tower together with the local terrain through the use of topographic maps, distance calculations, and elevation numbers. This use of local meteorology and local terrain characteristics properly accounted for the local terrain. As Mr. Orth testified, the dispersion model employed in the analysis is the EPA preferred model for simulating localized transport of pollutants, and all options chosen in the model followed EPA modeling guidelines.

Similar to its approach to Claim Four, Petitioner alleged in previous submissions to the Board and at hearing that the meteorological tower was improperly located and that the data collected from the tower was invalid, yet presented no credible evidence to show that the site and data were not representative of actual weather conditions. Consequently, Petitioner has not shown how the Executive Secretary erred and is not entitled to relief on this claim.

Petitioner Claim 7: Fish Lake National Forest and Dixie National Forest are each in the process of implementing a 'scheduled burn' program to improve the quality of the national forests. During the next ten years, each jurisdiction will potentially expel many tons of ash and pollutants into the local atmosphere which, by themselves, may potentially make Sevier Valley a non-attainment area. This potential is not noted in the NOI and is a major omission in modeling the airshed of Sevier Valley.

Utah Admin. Code R307-405-6(2) states that approved major sources must be included in the Executive Secretary's review of a PSD permit application. This major source review includes all allowable emissions of approved sources and the cumulative effect on air quality of all sources and growth in the affected area. At the hearing, Petitioner elected to not address this claim. On the other hand, the UDAQ reviewing engineer testified that the draft scheduled burns were not factored into the air quality modeling because (1) scheduled prescribed burns do not meet the PSD definition of stationary source; (2) scheduled prescribed burns are otherwise provided for under the UDAQ's Smoke Management Program under its own rule; and (3) the prescribed burns were in the draft stage, and would not have been considered in any event.

Petitioner failed to show how the Executive Secretary erred and is not entitled to relief on this claim.

Petitioner Claim 8: The AO for SPC would permit the use of dry baghouse filters only for removal of the pollutants produced by the combustion operation. Many authorities cite the superior value of water scrubbers for achieving MACT of these pollutants. I find no reference to the study of this process for inclusion in the NOI for SPC.

At hearing UDAQ's review engineer testified that SPC evaluated wet scrubbing but determined that dry baghouse filters would be more appropriate for particulate control at its facility. In previous submissions to the Board and at hearing, Petitioner challenged SPC's selection of dry baghouse filters over water scrubbers for the removal of the pollutants produced by the combustion operation. Yet Petitioner offered no expert testimony or other evidence in support of its claim.

Having failed to show how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

Petitioner Claim 9: UDAQ did not require sufficient analysis of the impacts of the Sevier Power Company coal-fired power plant on soil, vegetation, wildlife, and animals.

Utah Admin. Code R307-405-6(2)(a)(i)(D) states that a major source applicant must provide "[a]n analysis of the air quality related impact of the source or modification including an analysis of the impairment to visibility, soils, and vegetation and the projected air quality impact from general commercial, residential, industrial, and other growth associated with the source or modification." SPC submitted a soils and vegetation study as required by applicable law.

Although the Clean Air Act and the Air Conservation Act do not contain specific requirements for individual analyses of impacts on wildlife and animals, the secondary National Ambient Air Quality Standards ("NAAQS") do provide protection of wildlife and animals. The study demonstrated that impacts were within the secondary NAAQS for PM_{10}, NO_2, and SO_2. These secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. Moreover, section 302(h) of the Clean Air Act clearly states that the secondary NAAQS for pollutants are designed to protect animals and wildlife. 42 U.S.C. §7602(h).

As in its previous submissions to the Board, Petitioner continued to rely for authority solely on the preamble of the Utah Air Conservation Act. U.C.A. § 19-2-101(2). As the Executive Secretary has noted, this general statement is not an independent operative provision of the statute. See Price Development Co., L.P., v. Orem City, 2000 UT 26, ¶ 23, 995 P.2d 1237, 1246 (Utah 2000). Petitioner also relied on a variety of hearsay sources to insist that a wildlife study should have been conducted, yet supplied no credible evidence to support its claim.

Petitioner presented testimony from Scott Chamberlain, who testified as to alleged detrimental effects that selenium in the soil may have on plant life. While Mr. Chamberlain was not offered as an expert, he offered a sample plant (with dirt attached) from his property which he claimed to have analyzed for selenium content. Mr. Chamberlain's written report (which was admitted into evidence) failed to address Petitioner's claim because it established no connection between selenium content in the soil and potential emissions of selenium from the power plant. On the other hand, UDAQ's modeler presented a bar chart showing that the projected selenium emissions from the power plant were negligible and fully complied with the applicable standards.

Finally, Petitioner alleged that the Executive Secretary should have coordinated with various state and federal agencies (beyond the Federal Land Managers ("FLM"), yet could not identify any legal requirement to do so. Thus, Petitioner's argument again went to the adequacy of the rules, not to the current rules' requirements.

Having failed to show how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

Petitioner Claim 11: UDAQ did not thoroughly analyze the impact of health issues on citizens (sic) living in the shadow of the (SPC) power plant.

Dr. Steven Packham, UDAQ toxicologist, testified at hearing regarding the modeling results with respect to emissions levels with the potential to affect human health. With specific regard to Petitioner's allegation that the Executive Secretary should have conducted a formal study of health issues relating to local residents, Dr. Packham testified that the NAAQS are health-based standards set at levels to protect the health of the population, including sensitive populations. Consequently the regulations do not require or envision additional health impact studies of individual residents, as Petitioner claims the Executive Secretary should have required.

Moreover, Dr. Packham presented (and Petitioner did not rebut) demonstrative evidence to show that the modeling did not identify any threat to federal air quality standards or air quality related values from the proposed project.

By contrast, nowhere in its claim or its testimony did Petitioner distinguish between lawful emissions and what it believed to be the harmful level of emissions, and instead called witnesses who alleged that *no* levels of emissions are permissible. The Executive Secretary objected to this testimony as irrelevant, as it attempted to hold the Executive Secretary to a non-existent standard. Rather than offer testimony relevant to the subject of the hearing, Petitioner merely argued that the local health department should have had a role in the Approval Order process, and that a study of individual health issues should have been performed in any event. In all cases, Petitioner could not identify a rule that it believed the Executive Secretary had violated.

Having failed to show how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

Petitioner Claim 12: UDAQ failed to consider the financial impact of the property values, job loss, and additional medical expenses that the people of Sevier County will suffer from the AO of the Sevier Power Company permit.

Throughout these proceedings, Petitioner has made conclusory allegations of impacts on the local labor force, devoid of any context that would allow meaningful evaluation of the SPC facility's potential economic effect on the local area. Petitioner's testimony at hearing was likewise inconclusive, based on speculation and loose comparisons to hearsay studies and information regarding power plants in other states.

As to the issue of potential medical expenses, Petitioner referred to effects on local populations from other power plants. However, such references provided no basis for comparison as to uniformity in the characteristics of such power plants and their natural and

human surroundings, or even a basis for accepting the information and statistics proffered as being valid.

Petitioner did not rebut UDAQ testimony that the PSD increment values, which UDAQ included in the modeling, exist to protect local air from degrading to the point where violations of these health-based standards occur. Other than a generic reference to the preamble of the Air Conservation Act, Petitioner failed to identify any rule or statute with which the Executive Secretary did not comply. This continued reliance on the policy statement is revealing, as Petitioner has offered no other authority to support its claim.

Having failed to show how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

Petitioner Claim 13: UDAQ did not consider the detrimental effects of the Sevier Power Company plant on the surrounding 'natural attractions of this state. [Utah Air Conservation Act Chap. 19-2-101(2).]

As established through testimony at hearing, the Executive Secretary's review did not identify any threat to federal air quality standards or air quality related values, such as visibility, from the proposed project. Full details of the visibility and dispersion modeling analysis are in the UDAQ New Source Plan Review, modeling memorandum, and Response to Comments, all of which have been received as evidence in this case. Petitioner alleged that tourism will be affected, yet failed to cite any rule or statute relating to tourism or visibility, or to rebut UDAQ testimony establishing that no regulations exist regarding the protection of tourism.

Having failed to show how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

Petitioner Claim 14: It has been stated that NEVCO (SPC) has agreed to cover the coal pile. If this is so, the 'downwash' modeling needs to be reevaluated. If the 'downwash' modeling is to have any validity, the coal pile building must be included in the data in the NOI.

The downwash effect occurs when the height of the stack is less than 2.5 times the height of an attached building. The proposed height of the main stack for the SPC facility is 460 feet, more than 15 times the height of the 35-foot coal storage building, and the stack and the storage building are in separate locations on the property. Other than to insist (without supporting evidence) that the coal pile building would be over 50 feet high, Petitioner presented no evidence at all on this issue.

Having failed to show how the Executive Secretary erred, Petitioner is not entitled to relief on this claim.

IV. CONCLUSION

Petitioner's Request for Agency Action has been fully litigated at a hearing before the Air Quality Board. At that hearing, Petitioner failed to meet its burden of showing that the Executive Secretary erred in his issuance of the Approval Order. Petitioner's case was based almost solely on hearsay and for that reason alone is not entitled to relief. More importantly, Petitioner failed to show how the Executive Secretary's new source review of this permit did not meet the NSR PSD requirements as promulgated by this Board. Instead, Petitioner argued against the adequacy of the Air Quality Board's rules, which is a subject for another proceeding. Pursuant to U.C.A. § 63-46b-10, the Executive Secretary respectfully requests that the Air Quality Board issue an order adopting the Executive Secretary's proposed Findings of Fact and Conclusions of Law, and affirm the Sevier Power Company's Approval Order in its entirety.

Dated this 22nd day of May, 2006.

MARK L. SHURTLEFF
Utah Attorney General

Paul M. McConkie, Assistant Attorney General
Christian C. Stephens, Assistant Attorney General

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of May, 2006, I caused a copy of the foregoing to be mailed by United States Mail, postage prepaid, to the following:

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BEFORE THE UTAH AIR QUALITY BOARD

In the Matter of: Sevier Power Company Power Plant Sevier County, Utah DAQE-AN2529001-04	***Proposed*** **BOARD'S FINDINGS, CONCLUSIONS OF LAW, AND FINAL ORDER**

A. Introduction

Prevention of Significant Deterioration (PSD) review, which comes under the New Source Review (NSR) program, is intended to protect public health and welfare from any actual or potential adverse effect which in [EPA's] judgment may reasonably be anticipate[d] to occur from air pollution" and to ensure that "economic growth will occur in a manner consistent with the preservation of existing clean air resources." 42 U.S.C. § 4770(1). Utah's PSD regulations are codified by board rule and are found in Utah Administrative Code R307 et seq.

This case concerns an application for an air quality Approval Order to construct and operate a 750 megawatt (MW) coal-fired steam electric generating facility to be located near Sigurd in Sevier County, Utah. The Utah Division of Air Quality (a division of the Department of Environmental Quality) conducted a 17 month Approval Order review process, which

included opportunities for public comment and participation. The Executive Secretary of the Utah Air Quality Board ("Executive Secretary") issued an Approval Order for the Approval Order on October 12, 2004.

On November 1, 2004, Sevier County Citizens ("Petitioner") filed a Request for Agency Action ("RFA") appealing the Approval Order. Petitioner brought its challenge to the issuance of the Approval Order pursuant to Utah Admin. Code Rule R307-103-3(1) and Utah Code § 63-46b-3(3). Petitioner filed a supplemental RFA on March 16, 2005, setting forth more specific claims. At the April 13, 2005 Board meeting, the Board granted intervention to Petitioner and denied intervention to Sierra Club and PacifiCorp. However, the Board granted amicus status to both the Sierra Club and PacifiCorp. Discovery concluded on January 30, 2006. On February 27, 2006, the Executive Secretary filed pre-hearing motions to dismiss the four generalized allegations in Petitioner's November 1, 2004 RFA and for judgment on the pleadings. The Board heard arguments on the motions at an April 6, 2006 hearing. At the hearing, the parties stipulated that if Petitioner agreed not to pursue the allegations contained in the November 1, 2004 RFA, the Executive Secretary would withdraw the motion to dismiss.

With respect to the motion for judgment on the pleadings, the Board dismissed claims 2, 6, and 10 of Petitioner's March 16, 2005 RFA. The Board deferred judgment on claims 1, 3, 7, and 11-13 until after the hearing, opting to take evidence on questions of fact regarding issues raised in the motion and to hear both factual and legal arguments on the claims not included in the motion. As a related matter, through a March 13, 2006 letter to the Board and by oral testimony at the April 6, 2006 hearing, Sierra Club renewed a request which had earlier been denied by the Utah Court of Appeals to stay the proceedings until after the Utah Supreme Court

decided an appeal of the Board's previous denial of standing to Sierra Club. The Board denied the request and Sierra Club withdrew from participation as amicus.

A hearing on the merits was held in Richfield on May 10, 2006. The Executive Secretary, Sevier Power Company, and Sevier County Citizens called witnesses and presented evidence. Based upon the evidence presented at the evidentiary hearing, Petitioners have failed to meet their burden of proof on any of their claims of showing that the Executive Secretary erred in the issuance of the Approval Order.

B. Factual Background

Petitioner challenges the Title IV Operating and PSD Construction Air Quality Approval Order issued by the Executive Secretary to the Respondent NEVCO Energy Company LLC for the construction and operation of a coal-fired steam electric plant. The Approval Order was issued on October 12, 2004. As proposed the SPC plant would be built on a tract of land northwest of Sigurd, Utah, bordering Highway 89, in Sevier County, and would burn coal obtained from the Sufco Mine or other Utah coal sources. The facility would consist of a 2532 mmBtu/hour coal -fired atmospheric circulating fluidized bed (CFB) combustion unit which would operate with a total nominal output capacity of 270 MW with limestone injection, a dry lime scrubber, selective non-catalytic reduction with ammonia injection and coal and limestone handling facilities.

The proposed SPC project was considered a "major" stationary source under Prevention of Significant Deterioration regulations. Therefore, the proposed SPC project was considered a new major stationary source subject to PSD regulations. In order to satisfy State of Utah and PSD regulatory requirements, the required analyses included

Best Available Control Technology with a Maximum Achievable Control Technology component, PSD Class I and II increment consumption, National Ambient Air Quality Standard analyses, Additional Impact Analyses. Utah's PSD rules are set forth in Utah Administrative Code R307 et seq. The PSD portion of the UDAQ's Approval Order review process included significant public participation, including comments from the National Park Service (NPS) and the United States Environmental Protection Agency (EPA). Because of the proximity of the proposed facility to several national parks including Arches, Bryce, Canyonlands, Capitol Reef and Zions National Parks, and the Weminuche Wilderness Area, the NPS has a responsibility under the federal Clean Air Act (CAA) to review the Approval Order for visibility and air quality impacts to the Parks.

C. Burden of Proof and Standard of Proof

To prevail on the merits, Petitioner must show that the Executive Secretary acted in a manner contrary to law or fact in its Approval Orderting decision. Petitioner must show that the Executive Secretary erred, based on a preponderance of evidence appearing in the record as a whole. If Petitioner fails to make that showing, it has failed to meet its burden, and it is not necessary for the Approval Orderting agency or other respondents to disprove each and every allegation or theory propounded by the petitioner. Simply stated, Petitioner must show that the Executive Secretary's Approval Order determinations were in error. It is insufficient for parties challenging issuance of a PSD Approval Order to merely cast doubt concerning the Approval Order's compliance with regulatory and statutory standards or the application of the facts to the Approval Order

standards

D. Findings and Conclusions

1. Claim 1 of Petitioner's RFA asserts that the UDAQ failed to evaluate the combined emissions of the three proposed coal-fired power plants currently under application in the state of Utah and the effects it would have upon nearby National Parks. The parties do not dispute that the applicable rule is Utah Administrative Code R307-405-6(2) which requires that the determination of whether the source will cause or contribute to a violation of the maximum allowable increases or the NAAQS in any area take into account all allowable emissions of approved sources whether constructed or not, and, to the extent practicable, the cumulative effect on air quality of all sources and growth in the affected area.

In support of its claim, Petitioner failed to present any evidence that the proposed power plants referenced in its claim, the proposed IPP and Hunter expansions, met the criteria for being "approved" sources at the time in question, and therefore failed to show how such evaluation was required under the rules. The UDAQ's reviewing engineer, testified on behalf of the Executive Secretary that one of the proposed plants known as Hunter Four, was not approved at the time and in fact, its application had been put on hold. He also testified that projected emissions from the other plant, the IPP expansion, were factored into the NAAQS analysis, which claim Petitioner did not challenge with any evidence.

Petitioner also alleged in its Claim 1 that the UDAQ in November 2003 was notified of a violation of a 3 hr average for SO_2 from existing sources. The UDAQ's

reviewing engineer testified that such exceedence was determined to be caused by modeled emissions from two gypsum plants and that it was determined through the near field modeling that the exceedences were not contributed to in any way by the applicant source. Petitioner did not present any evidence to rebut this claim. The Executive Secretary offered further testimony that the UDAQ was addressing such Approval Orderting violations directly with the offending entities. Because Petitioner failed to offer evidence to show how the UDAQ failed to evaluate emissions of other approved power plants or present any evidence as to whether or how the exceedences from the gypsum plants were contributed to by the applicant source, Claim No. 1 is hereby denied.

2. Petitioner makes the following allegation in Claim 2:

> Should the petitioner wait until actual injury has occurred, which cannot precede the completion of the SPC project, there can be little redress beyond enforcing the emissions limitations of this Approval Order. Therefore the protects must be addressed prior to issuance of the Approval Order.

This claim was dismissed by the Board unopposed at the April 6, 2006 hearing, as being a moot claim as it addresses the issue of standing.

3. Petitioner contends in Claim 3 that UDAQ failed to adequately consider the use of Integrated Gasification Combined Cycle (IGCC) under the BACT analysis. Petitioner contended that IGCC is an innovative fuel combustion technique that the UDAQ should have required the source to consider under the definition of BACT in R307-101-2(4).[1]

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[1] Utah Admin. Code R307-101-2(4) defines Best Available Control Technology as:

an emission limitation and/or other controls to include design, equipment, work

Colin Campbell testified as an expert witness for the Executive Secretary. At the time of the hearing, Campbell was Senior Project Manager for RTP Environmental Associates in Raleigh, North Carolina. Campbell is recognized as an expert in the field of NSR PSD Approval Orderting and has extensive experience as a consultant in training industry and state and federal agencies in New Source Review and BACT application. Campbell had been hired by the UDAQ as a consultant for the purpose of reviewing the New Source Review Plan and Recommended Approval Order to ensure thoroughness and consistency with federal NSR requirements. His consultation with the Division primarily focused on the application of the BACT requirements. In response to the question as to whether the UDAQ's not requiring of the source to consider IGCC in its BACT analysis caused him concern as a consultant that the BACT requirement was not being properly applied, Campbell testified that he shares the opinion of nearly all of the states that have considered the issue, as well as the EPA, that IGCC should not be considered as an available control technology for more conventional coal-fired power plants because it would redefine the basic design of the source. He further testified that while IGCC holds great promise for minimizing air pollutant emissions from coal-powered electric

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> practice, operation standard or combination thereof, based on the maximum degree or reduction of each pollutant subject to regulation under the Clean Air Act and/ or the Utah Air Conservation Act emitted from or which results from any emitting installation, which the Air Quality Board, on a case-by-case basis taking into account energy, environmental and economic impacts and other costs, determines is achievable for such installation through application of production processes and available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall applications of BACT result in emissions of any pollutants which will exceed the emissions allowed by Section 111 or 112 of the Clean Air Act.

generation, it's not inherently lower emitting.[2] Campbell pointed out that while Illinois, Montana and New Mexico all have required proponents of coal-fired projects to submit some amount of information pertaining to IGCC, most have not, and no state has actually made a determination that IGCC was BACT for a plant that was proposed as a more conventional coal-fired plant. While the state's expert provided a detailed analysis of IGCC and its potential and how it relates to the process selected by the source and its specific application with regard to the BACT requirement, Petitioner's evidence was more of a recitation of collected materials, than helpful evidence to counter the state's position. The Board is persuaded that requiring the application of IGCC to the selected process in this case would fundamentally redefine the selected design of the source and would be a misuse of the BACT requirement. Petitioner's contention that IGCC is less emitting than coal-fired plants and the Executive Secretary had the discretion to require its consideration as part of the BACT requirement, which he should have exercised, is not enough to show that the Executive Secretary erred. Petitioner is therefore denied relief on this claim.

4. Petitioner contends in Claim 4 that the "UDAQ failed to determine that the ambient air within the Sevier Valley airshed is in compliance with the Clean Air Act and has no base line data with which to evaluate the additions requested by SPC." In support of its claim, Petitioner failed to present any meaningful evidence to show that the

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[2] " . . . because the cleanup occurs in the fuel rather than the exhaust gas, and the fuel is lower in volume and temperature as compared to the combustion exhaust gas, a more complete cleanup is achievable. In other words, the technologies in use at an IGCC facility are amenable to more effective air pollution control techniques, but the processes themselves aren't any cleaner than CFB or PC technology."

Division failed to follow EPA's Guideline to Air Quality Models and all PSD rules with respect to what was included in the modeling analysis. Respondents demonstrated through the testimony of the modelers regarding the use of ambient monitors for PM_{10} and the data derived therefrom to determine the area was in attainment and in compliance with the Clean Air and Utah Air Conservation Acts. There was further testimony from the modelers regarding how the additional emission sources referenced by petitioner were accounted for through various means consistent with EPA guidelines; how mobile sources were accounted for in the growth factors and background concentrations; how agricultural emissions were calculated in the background through use of the particulate monitor; and how imported pollution was also accounted for in background concentrations, as well as by the cumulative analysis conducted by the source and reviewed by the UDAQ. For its part, petitioners offered no expert testimony or meaningful evidence to show how the Executive Secretary erred. Petitioner's claim is denied.

5. Petitioner alleges in Claim 5 that "UDAQ failed to model the air flows and currents as they actually exist within the enclosed Sevier Valley, but rather assumed uniform distribution of emissions from the proposed SPC plant. In response to this challenge of the modeling, respondents offered detailed testimony from its modelers that meteorological data was obtained for the proposed site through the use of a 100 meter meteorological data collection tower erected in the proximity of the proposed plant site, how that data was applied to the local terrain through the use of topographic maps, distance calculations, elevation numbers, and so forth. For its part, petitioners provided

no expert testimony or meaningful evidence to show how the applied methods were in error. Petitioner's claim is denied.

6. Petitioner alleges in Claim 6 that "maximum predicted concentrations of PM_{10} in areas where the applicant has significant impact would occur along the eastern edge of the proposed site's boundary, and is the result of coal handling processes at the plant." At the April 6, 2006 hearing on the Executive Secretary's motion for judgment on the pleadings, the board ruled that this claim was encompassed in Claim 5, and was therefore dismissed as a separate claim.

7. Petitioner alleges in Claim 7 that draft scheduled burn programs involving the Fish Lake and Dixie National Forests should have been factored into the air quality modeling. Utah Admin. Code R307-405-6(2) requires that approved major sources be include in the Executive Secretary's review of a PSD Approval Order application. Petitioner elected to forego presenting any evidence on this claim. The reviewing engineer for the UDAQ, on the other hand, testified that the draft scheduled burns were not factored into the air quality modeling because (1) scheduled prescribed burns do not meet the definition of stationary source as defined in R307-405-6(2); (2) scheduled prescribed burns are otherwise provide for under the Smoke Management Program under its own rule; and (3) the prescribed burns were only at the draft stage, in any event, and would not have been considered. Having failed to show how the Executive Secretary erred, Petitioner is denied relief on this claim.

8. In Claim 8, petitioner challenges the selection of dry bag house filters over water scrubbers for the removal of the pollutants produced by the combustion operation.

Petitioner alleges in this claim that "many authorities site the superior value of water scrubbers for achieving MACT for the pollutant from the combustion stream and then alleges that wet scrubbing should have been evaluated for BACT.

In support of its claim, petitioner offered no expert testimony or other evidence which would persuade the board that this claim has any merit. The UDAQ's review engineer testified that wet scrubbing was evaluated but it was determined that dry bag house filters would be more appropriate for this particular plant. Specifically, that wet scrubbing is a technology that is traditionally used primarily for removal of acid gases, dry bag house is more efficient at removing particulate matter as well as controlling mercury and non-metallic hazardous air pollutant (HAP) emissions. Having failed to show how the Executive Secretary erred with respect to this particular claim, Petitioners claim is denied.

9. Petitioner's Claim 9 alleges that the "UDAQ did not require sufficient analysis of the impacts of the Sevier Power Company coal-fired power plant on soil, vegetation, wildlife, and animals." In support of its claim, petitioner relies upon Utah Admin. Code R307-405-6(2)(a)(i)(D) as the controlling regulation and presented testimony from Scott Chamberlain who testified as to the detrimental effects that selenium in the soil has on plant life. While Mr. Chamberlain was not offered as an expert, he did bring with him a sample of a plant from his property with dirt attached which he had analyzed for selenium content. Mr. Chamberlain's written report which was admitted into evidence did little to address petitioner's claim because it failed to draw a nexus between selenium content in the soil and potential emissions of selenium

from the power plant. On the other hand, the UDAQ's modeler showed in a bar chart how projected selenium emissions from the power plant were negligible. Petitioner also alleged that endangered species such as the eagle were known to nest in the area and potential impact of the power plant upon such endangered species had not been evaluated.

On the other hand, the record shows that the UDAQ did require a soils and vegetation study as required by law. Respondents noted that although the analysis of impacts on wildlife and animals is not specifically required under either the Clean Air Act or the Air Conservation Act, the secondary NAAQS do provide protection of wildlife and animals and that the impact analysis demonstrated that impacts were within the secondary NAAQS for PM_{10}, NO_2, and SO_2. These secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. Moreover, section 302(h) of the Clean Air Act clearly states that the secondary NAAQS for pollutants are designed to protect animals and wildlife. 42 U.S.C. § 7602(h).

Petitioner referred to a variety of hearsay sources in arguing that a wildlife study should have been conducted, yet supplied to meaningful evidence to support its claim. Because petitioner failed to show how the Executive Secretary erred, it is not entitled to relief on its claim.

10. Petitioner's Claim 10 was dismissed by the board at the April 6 hearing, the board having found that the claim failed to state a claim upon which relief could be granted and that the issue on analysis of wildlife was encompassed by Claim 9.

Specifically, the board found that the preamble language in Utah Code Ann. § 19-2-101(2) cannot be used as an independent operative provision of the statute.

11. Petitioner's Claim 11 alleged that "UDAQ did not thoroughly analyze the impact of health issues on citizens living in the shadow of the power plant." In addition to the evidence in the record and testimony presented as to of the validity of the modeling, Dr. Stephen Packham, UDAQ toxicologist, testified regarding the results of the modeling with respect to emission levels with the potential to affect human health. Dr. Packham testified about the purpose of the NAAQS and how they are health based standards designed to protect sensitive populations. For its part, petitioner failed to show that the modeling was not valid and that the NAAQS were being violated. Petitioner's claim is denied.

12. Petitioner's Claim 12 alleged that "UDAQ failed to consider the financial impact of the property values, job loss, and additional medical expenses that the people of Sevier County will suffer from the AO of the Sevier Power Company Approval Order." Other than generic reliance upon the Utah Code Ann. § 19-2-101(2), petitioner failed to allege how any action by the Executive Secretary did not comply with the law, or present any credible evidence to support its allegation. On the other hand, the NAAQS are health-based standards and serve to protect public health, and petitioner has failed to show how the NAAQS have been violated. Similarly, the PSD increment values, which UDAQ included in the modeling, exist to protect local air from degrading to the point where violations of these health-based standards occur. Petitioner is not entitled to relief on this claim.

13. Petitioner's Claim 13 alleges the "UDAQ did not consider the detrimental effects of the Sevier Power Company plant on the surrounding 'natural attractions of this state." [Utah Air Conservation Act Chap. 19-2-101(2)].

This is another example of the petitioner failing to show how a PSD review requirement was violated. Petitioner must be able to show what was required and in what way all of the analysis that was done including the Class I visibility analysis and the soil and vegetation analysis and the application of BACT and MACT addressing removal of particulate matter as well as controlling mercury and non-metallic hazardous air pollutant (HAP) emissions. Petitioner failed to show how the Executive Secretary erred. Relying upon Utah Code Ann. § 19-2-101(2) which cannot be used as an independent operative provision of the statute, is not enough. By failing in this showing, petitioner is not entitled to relief.

14. Petitioner's Claim 14 alleges that by covering the coal pile, the downwash modeling needed to be reevaluated and the coal pile building included in the data in the NOI. Respondents offered testimony from the modelers that the downwash effect occurs when the height of the stack is less than 2.5 times the height of an attached building and that the height of the proposed building to house the coal pile is 35 feet. If as is demonstrated in the record that the height of the main stack for the proposed power plant is, as is shown by the record, 460 feet, that would be more than 15 times the height of the coal storage building. Even if, as petitioner claims, the coal pile building would be 50 feet high, the downwash effect would not occur. Petitioners offered no evidence to rebut this conclusion. Petitioner's claim is denied.

E. Order

Petitioners having failed to show for any of its claims how the Executive Secretary erred, Petitioner claims for relief as set forth in its Request for Agency Action dated March 16, 2005 is denied.

DATED this _____ day of June, 2006.

UTAH AIR QUALITY BOARD

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By:

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BEFORE THE UTAH AIR QUALITY BOARD

SEVIER COUNTY CITIZENS FOR CLEAN AIR AND WATER Petitioner, And SEVIER POWER COMPANY; and the EXECUTIVE SECRETARY OF THE UTAH AIR QUALITY BOARD, Respondents	In the matter of Sevier Power Company Power Plant; Case No. DAQE-AN2529001004 SEVIER POWER COMPANY'S CLOSING BRIEF WITH ATTACHED PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

STATEMENT OF THE CASE

On the 12th of October, 2004, Richard W. Sprott, Executive Secretary of the Utah Air Quality Board signed the Approval Order (the "AO") to authorize the construction and operation of the Sevier Power Company (the "SPC") 270 MW Coal-Fired Power Plant in Sigurd, Utah. The Sierra Club, the Grand Canyon Trust and the Sevier County Citizens for Clean Air and Water ("SCC") filed Requests for Agency Action ("RFA") to appeal the Approval Order and also filed Statements of Standing and Petitions to Intervene. The Board resolved the standing issue by granting standing to the SCC and denying standing for the Sierra Club and the Grand Canyon Trust. These two parties have appeal the Board's standing order and a decision from the Supreme Court is pending.

The SCC RFA dated March 16, 2005 contains 14 allegations of alleged error committed by the Executive Secretary in the issuance of the AO. The Board has now completed discovery

and held a hearing on preliminary motions. A hearing on the merits of the RFA was held May 10, 2006 in Richfield, Utah. The Board ruled at its April 6, 2006 hearing that that SCC's allegations 2, 6, and 10 should be dismissed with prejudice. The Board also ordered that unless additional facts were submitted at the May 10, 2006 hearing, that the following SCC allegations would also be dismissed: 1, 3, 7, 11, 12, and 13. The remaining allegations, 4, 5, 8, 9, and 14 are contested requiring Board determination on these allegations after the May 10th hearing.

In the opening statement of John Veranth, Chair of the Utah Air Quality Board (the "Board") defined the scope of the May 10, 2006 hearing.

"This hearing is limited to the Board's authority to determine whether the existing rules of the Utah Air Quality Board were followed by the Executive Secretary in issuance of the Approval Order. It is not a hearing for determining whether the existing rules should be modified."

At the May 10th hearing, the Executive Secretary and Sevier Power Company presented the following witnesses: John Jenkes, DAQ Environmental engineer; Collin Campbell; RTP Environmental Associates, George Wilkerson, Meteorological Solutions, Inc; Tom Orth, DAQ; Air Quality Monitoring Consultant; Dave Prey, DAQ: Air Quality Monitoring Consultant; Dr. Steve Packham, DAQ Toxicologist; and Rick Sprott, Executive Secretary, Utah Air Quality Board. All of these witnesses were listed and qualified as expert/fact witnesses.

SCC presented the following fact witnesses: James Kenyon, Dick Cumiskey, Scott Chamberlain and Thann Hanchett. The DAQ Board accepted into the hearing record the following: All of the DAQ administrative record complied in the processing of the SPC application; Exhibits from the Executive Secretary, ES 1 – ES 7; SCC's Exhibits, marked P-1 and P-2 and SPC's exhibit, marked SPC-1. The parties made opening statements, and the parties, including Utah Power made closing statements. Utah Power was granted *amicus curia* standing and presented a closing argument related to the IGCC allegation of the SCC RFA.

STATUTORY RESPONSIBILITIES OF THE PARTIES

1. The Executive Secretary is required as a condition precedent to the construction of a power plant to determine if the proposed construction will be in accord with the applicable rules in force under this chapter. UCA 19-2-108(2)(a)(i).

2. Any person aggrieved by the issuance of an order granting the construction of a new installation is entitled to a hearing. Following the hearing, the permit may be affirmed, modified or withdrawn. UCA 19-2-108(3).

3. The procedure for a formal adjudicative proceeding is governed by the Utah Administrative Procedures Act, UCA 63, Chapter 46b, Section 6, Responsive Pleadings, Section 7, Discovery and subpoenas, Section 8, Hearing procedure, Section 9, Intervention and Section 10, Orders.

BURDEN OF PROOF

1. The test for the burden of proof is set forth UCA 63-46b-16, Judicial review. The appellate court shall grant relief only if on the basis of the agency' record, it determines that a person seeking judicial review has been substantially prejudiced by an agency action that is unconstitutional, beyond the jurisdiction conferred by statute, failure to decide all of the issues, made an error in the application of the law, failed to follow prescribed procedure, the board is improperly constituted, arbitrary or capricious or "(g) the agency action is based upon a determination of fact, made or implied by the agency, that is not supported by substantial evidence when viewed in light of the whole record before the court."

2. The moving party has the obligation to show by substantial evidence that the executive secretary has failed to follow the applicable rules in force at the time the AO was issued. The SCC RFA identified 14 allegations of error. If SCC does not show error by substantial evidence,

it can not prevail in its request to have the AO vacated. However, the substantial evidence requirement cited above also requires the Board find that the Executive Secretary's compliance meets the substantial evidence test in order to be affirmed and "appeal proof." It seems to be a sound allocation of burden. The moving party has the first burden of showing substantial evidence. If there is substantial evidence of error, that is not countered, then the moving party wins. However, if there is no substantial evidence of error, and there is substantial evidence that the agency was correct, the Agency entitled to affirmation.

ARGUMENT

I. UCA 63-46B-10(3). Procedures for formal adjudicative proceedings-Orders. A finding of fact that was contested may not be based solely on hearsay evidence unless that evidence is admissible under the Utah Rules of Evidence.

As SCC started the presentation of the merits of its case, attorneys for both the Executive Secretary and Sevier Power Company objected to the admissibility of evidence which violated the **Utah Rules of Evidence, Article VIII. Hearsay**. The Chairman of the Board allowed the testimony because UCA 63-46b-8(1)(c), provides: "The presiding officer may not exclude evidence solely because it is hearsay." Although the procedure section, UCA 63-46b-8, allows hearsay evidence to be submitted during the hearing, the Order section, UCA 63-46b-10 mentioned above, does not allow a finding of fact that is based solely on hearsay evidence unless it meets one of the exemptions allowed by the **Hearsay** rules cited above. The Executive Secretary and Sevier Power Company were granted a continuing objection to hearsay evidence. Not once did the SCC attempt to justify the admission of their hearsay evidence under any of the exemptions allowed in the **Hearsay Rule** cited above.

Since the SCC did not have a single expert to testify about any of the 14 alleged errors, the bulk of their testimony was a referencing to other parties, who may or may not have been

experts, and who may or may not have had any knowledge about the AO and who where certainly not available for cross examination to determine the validity of their opinions to the issues being contested. The net effect is that most of their testimony is hearsay. It would not have been admitted in a judicial court. It can not provide the basis for any finding of fact that the Executive Secretary committed a reversible error in the issuance of the AO. UCA 63-46b-10(3).

Each SCC witness made repeated references to articles prepared by third parties as evidence to prove their 14 allegations. Each reference violated the **Utah Rules of Evidence** for the admission of **Hearsay** testimony. A classic example of hearsay evidence violation occurred over the allegations that the DAQ failed to require IGCC as a Best Available Control Technology (BACT). SCC's Exhibits P-1 and P-2 are a collection of articles prepared by 3rd parties that advocate IGCC as BACT. Once again, there was no foundation as to the qualifications of the article author's, in fact a couple of the articles appear to be briefs prepared by the Sierra Club, who not a party to this is preceding. Many of the articles, compared IGCC to Pulverized Coal ("PC") boilers that are not even related to the Circulating Fluidized Bed ("CFB") boilers authorized in the SPC AO

II. The DAQ administrative record on the SPC application and its review, including notices, hearings, and technical findings contain substantial evidence supporting a finding that the Executive Secretary did not error in the granting of the AO.

The administrative record for the AO is detailed in its review of the SPC application. The DAQ also went an extra mile and retained the services of Colin Campbell, a noted expert in the field of coal-fired air quality permitting issues. He was assigned to the review the work of the DAQ to assure compliance with Federal & State law and regulation. His recommendations were adopted in the AO. The Executive Secretary testified that the efforts of the DAQ staff and consultants went above and beyond the minimum requirements for an AO.

III. Many of the SCC allegations are simply attempts to change the existing rules, rather than just determine if the existing rules were complied with.

During the RFA appeal process, it became clear that SCC really wanted the rules changed so that no coal fired power plant would be built in their neighborhood. The IGCC battle is a national goal of environmental groups opposed to the use of coal to fuel power plants. EPA has treated IGCC as a process, yet now the environmental groups are advocating that it become a BACT for all coal fired power plants. It is this issue that caused Utah Power to petition for intervention. Utah Power participated in the hearing, and clearly stated its view that IGCC was a separate process, but not a BACT. The DAQ, SPC, and Utah Power all have mentioned that this is a legislative/ruling making decision, not a permitting requirement.

IV. The SCC 14 allegations of error have not been supported by substantial evidence, in contrast, the DAQ and SPC have submitted substantial evidence that the SCC 14 allegations were not errors and that the permit was properly issued.

The Executive Secretary petitioned the DAQ Board to rule in a summary judgment that 9 of the 14 allegations should be dismissed as a matter of law. The Board has already ruled that three allegations are without merit and are dismissed: 2, 6, and 8. The Board has indicated that five allegations may be without merit unless SCC is able to submit evidence of error in the May 10, 2006 hearing. These allegations are: 1, 3, 7, 11, 12, and 13. The following allegations are contested by the parties and remain for the Board to review: 4, 5, 8, 9, and 14.

A brief review of each allegation will indicate that SCC has failed to submit evidence to support any of their 14 allegations of error and the AO is supported by substantial evidence.

SCC 1: UDAQ failed to evaluate the combined emissions of the three proposed coal-fired power plants currently under application in the State of Utah and the effects it would have upon the nearby National Parks.

SPC: The testimony of SPC expert witness, George Wilkerson, CCM, Meteorological Solutions Inc, indicated that after consultation with the DAQ, the far field monitoring for the

SPC permit included sites and projects beyond the area required by the then current rule for monitoring. The expanded area included the IPA power plants in Delta, Utah, the cement plant in Leamington Canyon as well as the proposed SPC plant. It did not include the Hunter 4 plant because its application had been withdrawn from the DAQ. The area monitored was shown on slide # 19 of SPC Exhibit 1. The far-field modeling area extended in Western Colorado as shown on slide # 20. Each Class I area (national park) was reviewed by the CALPUFF model as shown on slide #21. The Far-field Class I results as shown on slides 22, 23, 24 and 25 indicated that the Class I Visibility (Regional Haze) impact, Deposition, and Plume Blight modeling results (slides 22 – 26) were below threshold vales. The SCC presented no evidence to the contrary that the modeling done did not comply with the modeling rules and this allegation should be dismissed with prejudice.

SCC 2: Should the petitioner wait until actual injury has occurred, which cannot precede the completion of the SPC project, there can be little redress beyond the enforcing the emission limitations of this Approval Order. Therefore the protest must be addressed prior to issuance e of the Approval Order.

SPC. This allegation was mooted by the granting of standing to the SCC. It was dismissed by the Board in April.

SCC 3: UDAQ failed to adequately consider the use of IGCC both as a viable method of achieving BACT and as a cost effective way to minimize emissions.

SPC. The DAQ expert, Colin Campbell, was duly qualified as an expert and in his opinion, IGCC is a competing process with the CFB or PC for coal fired plants. It is not a BACT. He also testified that the then current position of EPA in 2004 was that it was a process, not BACT. He also noted that the IGCC plants currently operating, were designed as an IGCC process, not as a BACT for some other process. He also indicated that most of the states treat IGCC has a process, not BACT. SCC presented exhibits P-1 and P-2, attempting to present evidence that

IGCC should be BACT. Both the DAQ and SPC objected to their evidence on grounds that it violated the Utah Rules of Evidence on Hearsay. SCC did not show any exemption in the Utah **Hearsay** rule that allowed their third party articles to be considered as exemptions to the Hearsay **Evidence Rule**. They did not have an expert to testify that IGCC should be BACT. Without the submission of any substantial evidence of error and in the face of the substantial evidence submitted by the DAQ, this allegation should be dismissed with prejudice.

SCC 4: UDAQ failed to determine that the ambient air within the Sevier Valley airshed is in compliance with the Clean Air Act and, in fact, has no base line data with which to evaluate the additions requested by SPC.

SPC: SPC expert witness, George Wilkerson, mentioned above, testified about the locations for both the air monitoring tower and the particulate monitoring sites were selected after consultation with the DAQ. These sites then collected data for the one year period required by DAQ rule. Slides #'s 3, 4, 5, and 6 identify the location of the sites, and windrose developed from the monitored data. He also indicated, "One year of background PM 10 monitoring was conducted based on initial dispersion modeling of the proposed source which was compared against *de minims* monitoring thresholds per R307-405-6(6). Based on final modeling results, PM 10 was the only pollutant that showed concentrations greater than *de minims* levels-thus validating the original monitoring required by UDAQ. Tom Orth, DAQ testified that he had consulted with SPC's consultant, George Wilkerson on the SPC application and that the work finally submitted in the application met the requirements for near field monitoring. SCC did not retain an expert to testify about the alleged error. SPC and DAQ submitted expert testimony about the one year of back ground monitoring before modeling the results of the proposed SPC Plant. The substantial non hearsay evidence was submitted by the DAQ and SPC, not the SCC. The Board should dismiss this allegation with prejudice.

SCC 5: UDAQ failed to model the air flows and currents as they actually exist within the enclosed Sevier Valley, but rather assumed uniform distribution of emissions from the proposed SPC plant.

SPC: SPC expert witness, George Wilkerson, testified that "One year of multi-level meteorological monitoring was conducted in a location representative of the proposed SPC Plant. The meteorological monitoring was conducted in accordance with PSD monitoring requirements which resulted in a very high quality data set. In addition, the 100 meter wind data were used to model emissions from the stack and the 10 meter wind data were used to model emissions from ground level sources." He responded that in his opinion, the location of the modeling tower produced data that was an accurate reflection of what was happening with the wind in the Sevier Valley. Tom Orth testified that the PM 10 site was selected with his consultation. He also mentioned that the upper air data is supplied by the US Weather Service, that it was collected at the Salt Lake Airport and that this data is representative of the upper air conditions in the Sevier Valley and was preferable to the US Weather Service upper air data from either Colorado or the Nevada site. He also noted that the CAL PUFF modeling has not yet been approved for near field modeling. He also noted that the SPC data met the requirements of the DAQ.

The SCC did not present an expert witness to submit evidence on this issue. Dick Cumiskey testified about what he thought about the modeling. He was not qualified as an expert, but he did have experience as a sailor. Once again, the substantial evidence was submitted, not by the SCC, but by the DAQ and SPC. The monitoring and review of the SPC modeling is included in the administrative record. This SCC claim should be dismissed with prejudice.

SCC 6: Maximum predicted concentrations of PM10 in areas where the applicant has significant impact would occur along the eastern edge of the proposed site's property boundary and is the result of coal handling processes at the plant.

SPC: SPC expert witness, Wilkerson, testified that the plant met and exceeded the requirements for PM 10. Slides # 13 and 14. The Board determined at the April meeting dismissed this allegation.

SCC 7: Fish Lake National Forest and Dixie National Forest are each in the process of implementing a "scheduled burn" program to improve the quality of the national forests. During the next ten years, each jurisdiction will potentially expel many tons of ash and pollutant into the local atmosphere which by themselves may potentially make Sevier Valley a non attainment area. This potential is not noted in the NOI and is a major impact in modeling the airshed of Sevier Valley.

SPC: DAQ witness, John Jenks, who was qualified as an Expert and was the senior permit reviewer, testified that "scheduled burns" are not from stationary sources and by rule are not included in modeling for the plant. The "scheduled burns" are factored into the background data. At the time of the application, the Forest Service had not scheduled any burns. The decision to not include scheduled burn data in the modeling was consistent with the air quality rules for the SPC permit. SCC did not submit an expert witness on this issue and did not submit evidence that treating a scheduled burn as a part of a "Smoke Management" Plan was an error. The substantial evidence was submitted by the DAQ. This allegation should be dismissed with prejudiced.

SCC 8. The AO for SPC would permit the use of dry baghouse filters only for removal of the pollutants produced by the combustion operation. Many authorities site the superior value of water scrubbers for achieving MACT of these pollutants. I find no reference to the study of this process for inclusion in the NOI for SPC.

SPC: The permitted SPC process uses a CFB with dry scrubbing and air cooling. The dry process was selected in part to minimize the impact of the plant on the Sevier Valley by limiting water use to a minimum. SPC expert witness, George Wilkerson, testified that the modeling for the plant indicated that it would meet and exceed the NAAQS for each near field monitoring test. See slides # 11-17. John Jenks testified that wet scrubbing was not applicable to air cooled CFB

process. He also noted that dry lime scrubbing, which is part of the approved SPC process works good. The modeling results indicate that authorizing dry scrubbing was not an error.

SCC did not have an expert witness to testify that the approval of the dry scrubber was an error. Their witness did refer to third parties who thought wet scrubbing was better. Once again, an allegation can not be included in the order that is based on hearsay evidence. The SCC did not meet its substantial evidence burden and the allegation should be dismissed with prejudice.

SCC 9: UDAQ did not require sufficient analysis of the impacts of the Sevier Power Company coal-fired power plant on soil, vegetation, wildlife, and animals.

SPC: SPC expert witness, George Wilkerson, testified that "An independent soils and vegetation analysis was performed by a certified wildlife biologist at ReldElk Environmental Consulting per the specifications outline in $307-405-6(2)(D). On-site interviews were conducted with the Natural Resource Conservation Service, Utah Field Office of the BLM and the Utah District of the USFS in Richfield." A physical inspection of the potential sensitive plants and soils in the area was conducted and a discussion of his findings was contained in the permit application. David Prey, UDAQ was qualified as an expert. He testified that the modeling from the SPC application indicated that indicated that results on crop, plants and soils, where under threshold requirements for more extensive modeling and study. He also testified that the NAAQS standards are set to protect wildlife. He testified that the SPC modeling indicated that the SPC plant modeling was well under secondary increment protections of the NAAQS. He also indicated that the Class I protection results also indicated that the plant was under the threshold levels for visibility, and deposition protection. He testified that the NAAQS values are set nationally. He indicated that the DAQ did not receive any comments from the Federal Land Managers (National Park Service ("NPS"), Forest Service or Bureau of Land Management ("BLM")) about the AO.

SCC did not have an expert witness to testify on this allegation. James Kenyon proceeded to testify on behalf of many of the Federal Land Managers. His testimony is a classic hearsay violation. The Park Service should testify about the Park Service, not James Kenyon. His testimony about eagles dying in Indiana was not relevant to the SPC AO. Scott Chamberlain testified about the evils of selenium, but had no evidence that the Plant would produce the levels mentioned in the study. Once again, SCC has failed to present any substantial evidence that the process followed by the DAQ was in violation of its existing rules. The DAQ and SPC have submitted substantial evidence that the DAQ has complied with its existing rules. This allegation should be dismissed with prejudice.

SCC 10: UDAQ illegally did not consider the impact on waterfowl and wildlife, Chap 19-2-101(2) of the Utah Air Conservation Act. This chapter requires that UDAQ "prevent injury to plant and animal life and property." The US Wildlife Service and Utah Div. of Wildlife were never contacted and no studies were undertaken. Migrating waterfowl and others, such as ducks, geese, cranes, and eagles, nest and feed in the area. The eagle's main food source in the winter is jackrabbit that frequents the area of the power plant. Not only did UDAQ ignore the studies on wildlife and animals, they ignored comments stated during the public comment period o n this subject.

SPC: This allegation was dismissed by the Board at their April 2006 meeting. The testimony mentioned above in reference to SCC 9's allegations are responsive to this allegation.

SCC 11: UDAQ did not thoroughly analyze the impact of health issues citizens living in the shadow of the (SPC) power plant.

SPC: Dr. Steve Packham, the State Toxicologist, was qualified as an expert witness and he testified at length about the health issues related to the AO. He reviewed the health impact of the SPC application and found that there would be no violations of the NAAQS and these standards are set to protect the public from health impacts from the SPC proposed plant emissions. He testified that the health issues were examined and the AO for SPC meets all of the health requirements. He noted that sensitive health populations are protected by the stringent NAAQS

standards. He toted that the toxicity levels from the plant were below the threshold levels required for further health analysis.

SCC countered with testimony from Thann Hatchet who was not qualified as an expert witness. Mr. Hatched reviewed a long list of third party articles citing air pollution as a health risk of significant portion. All of the articles violate the **Hearsay** rule for evidence. None of the authors of the respective studies being reference were qualified as experts. No foundation was made that the findings of the respective articles identified as causing health issues were related to the quantities produced by the SPC Plant. It was clear that he was opposed to building the plant in Sigurd, Utah. This is an example of the DAQ submitting substantial evidence from the State Toxicologist that the DAQ had thoroughly analyzed the health impact of the plant and that the Plant would not violate the health protectors found in the NAAQS standards. This allegation should be dismissed with prejudice.

12. UDAQ failed to consider the financial impact of the property values, job loss, and additional medical expenses that the people of Sevier County will suffer from the AO of the Sevier Power Company permit.

SPC: John Jenks, UDAQ, and the senior permit reviewer, who was qualified as an expert and fact witness, testified that as part of the application, the growth directly attributable to the power plant was included in the Engineering Review, which is Exhibit G, a part of the administrative record. These issues were the limited fiscal impact review items that are considered as part of the air quality permitting rules. The scope of the rules does not allow for a review of the impact of the plant on property values, whether increased or decreased by the plant. The plant permit emission requirements are designed to protect health. Exhibit G is an extensive review as part of the permit application and review.

James Kenyon testified about allegation #12. He was not qualified as an expert. Most of his references were to third party statements. He had no information to indicate that the DAQ committed error in dealing with this part of the AO. Once again, the SCC could have had an expert testify, but did not, and their presentation did not submit substantial evidence to substantiate their allegation of error. This is one of those allegations that the Board identified as being ready to dismiss unless evidence was submitted. It wasn't submitted and it should be dismissed with prejudice.

SCC 13: UDAQ did not consider the envioronmental effects of the Sevier Power Company plant on the surrounding "natural attractions of this state." (Utah Air Conservation Act Chap. 19-2-101(2).)

SPC: SPC expert witness, George Wilkerson, testified at length about the far field modeling conducted as part of the SPC application. Refer to slides #'s 19 – 26, SPC-1. Class I areas include the National Parks, including all of the Utah National Parks and Monuments as well as the Federal Wilderness Area in Western Colorado. The results as summarized on slide # 26 indicate that the Class I Visibility, Deposition and Plume Blight impacts of the SPC plant are below the threshold values that require additional measures. David Prey from the DAQ who had worked on over 100 air quality permits testified that the SPC application complied with all DAQ rules that are designed to protect the natural attractions of the state.

James Kenyon for SCC testified in support of this allegation. He quoted extensively from some Federal Land Managers in a clear violation of the **Utah Rules of Evidence Hearsay Rule**. The Federal Land Mangers did not submit written comment on the AO. Because a finding of fact can not be based on hearsay and because the DAQ and SPC submitted substantial evidence that the DAQ did evaluate any potential damaging impact on the surrounding natural

attractions and found none, this allegation is not supported by substantial evidence and should be dismissed with prejudice.

SCC 14: It has been stated that NEVCO (SPC) has agreed to cover the coal pile. If this is so, the "downwash" modeling needs to be reevaluated. If the "downwash" modeling is to have any validity, the coal pile building must be included in the data in the NOI.

SPC: SPC expert witness, George Wilkerson, testified that the PM10 NAAQS requirements were met with the coal pile uncovered. Slide #'s 13 and 14. He testified further, "SPC does plan to cover the pile. The building will have a height of 35 feet. Downwash parameters were regenerated after adding the coal pile building and the model was rerun. The resulting concentrations indicated the maximum 24-hour PM10 concentration will drop nearly in half, from 14.1ug/m3 to 7.8 ug/m3." Tom Orth testified that the AO was approved without additional modeling for the covered building because covering the building, would only reduce PM 10 emissions. Covering the coal pile is an example of the SPC application going above and beyond the requirements for power plant approval. SCC did not obtain an expert witness to present evidence on this allegation. The only evidence, and it was substantial, supported the approved permit. This allegation should be dismissed with prejudice.

CONCLUSION

SCC failed to submit substantial evidence to support its 14 allegations of error with the Approval Order. The DAQ and SPC have submitted substantial evidence to counter the alleged errors and to affirm that the AO was appropriately issued consistent with the then current rules for obtaining a PSD permit. The SCC RFA should be denied and the October 12, 2004 SPC Approval order affirmed as originally issued by the Executive Secretary.

Dated this 22nd Day of May, 2006

Finlinson & Finlinson, PLLC

Fred W. Finlinson

SPC PROPOSED
FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

The Utah Air Quality Board now enters the following Findings of Fact, Conclusions of Law and Order:

FINDINGS OF FACT

1-9: SPC suggested the inclusion of the 9 uncontested facts submitted by the Executive Secretary in his **Memorandum in Support of Motion For Judgment On the Pleadings**, dated February 27th, 2006.

10. UCA 63-46b-8(1)(c) allows the introduction of hearsay evidence; however, a finding of fact may not be based solely on hearsay evidence unless that evidence is admissible under the Utah Rules of Evidence. UCA 63-46b-10(3). The Executive Secretary and SPC objected to the introduction of hearsay evidence proffered by SCC. All testimony from the SCC witnesses that referred to articles and or statements made by others is hearsay evidence, which was objected to by the Executive Secretary and SPC. SCC made no attempt to qualify such hearsay evidence as entitled to an exemption to the prohibition of hearsay evidence allowed by the Utah Rules of Evidence.

11. The record before the Board, which consists of the administrative record of the DAQ related to the application, review and issuance of the AO, the exhibits admitted and the testimony of the DAQ/SPC witnesses at the hearing constitute substantial evidence that the AO was properly issued under the existing federal and state laws and rules for the construction of coal-power plants.

12. The SCC 14 allegations of error are not supported by substantial evidence as noted below:

(1) The far field monitoring covered all of the required area, plus additional impacts approved by the DAQ, including the IPA units, 1-3, at Delta, the cement plant in Leamington

Canyon and Hunting plants, 1-3, but properly did not include the Hunting #4 because its application had been withdrawn from consideration.

(2) The standing allegation was dismissed at the April Board meeting.

(3) IGCC is a separate process, not a BACT for other competing coal-fired processes, such as PC or CFB processes. Any change of this current EPA or DAQ rule would require a legislative change, rather than making the change on the approval of a new source coal-fired power plant.

(4) The base line PM 10 data for the power plant was obtained from the applicant's one year of monitoring as prescribed by DAQ rules. Other base line information was supplied by the DAQ.

(5) The modeling for the air flows in the Sevier Valley complied with the current DAQ rules for monitoring and reflected the air flows as they exist in Sevier Valley.

(6) The allegation about PM10 concentrations along the eastern boundary of the plant was dismissed at the April Board meeting.

(7) Scheduled burns are not stationary sources to be part of an Approval Order. They are properly managed is the DAQ Smoke Management Program.

(8) Wet scrubbing is not applicable to the SPC air cooled CFB process. The dry scrubbing process included as part of SPC approval order meets all of the air quality emission requirements.

(9) The SPC application contained an independent soils and vegetation analysis performed by a certified wildlife biologist at RedElk Environmental Consulting as required by R307-405-6(2)(D). On-site interviews were conducted with the Natural Resource Conservation Service, Utah Field Office of BLM and the Utah District of the USFS in Richfield. NAAQS

standards are designed to protect soil, vegetation and wildlife. SPC modeling indicated no impacts above threshold levels for more extensive monitoring and study.

(10) The allegation about illegally not considering the impact on waterfowl and wildlife was dismissed at the April Board meeting.

(11) The DAQ Toxicologist, Dr. Steve Packham testified that the NAAQS standards are designed to protect the health of the public. The SPC plant's permitted out put is well below NAAQS standards and will not have a detrimental impact on the public's health. SCC witness, Hanchett, is not a medical expert, but he believes that the plant will be harmful to the health of the citizens. His reference to the statements of others is hearsay evidence.

(12) The DAQ examined the fiscal impacts of growth related to the SPC plant. These findings are included as Exhibit G, of the Engineering Review of the Application. A review of the plant on property values is not part of the required permit review.

(13) The SPC application contained significant information about the impact of the plant on all Class I sites in Utah and Western Colorado. Modeling indicated that the impact was less than the Threshold Levels that required additional review.

(14) Modeling the impact of covering of the coal pile with a building reduced the PM 10 discharge from 14.1 ug/m3 to 7.8 ug/m3. The initial discharge of 14.1 was well below allowable PM 10 discharges.

CONCLUSIONS OF LAW

1. All testimony from the SCC witnesses that referred to articles and or statements made by others is hearsay evidence. A finding of fact may not be based solely on inadmissible hearsay evidence.

2. The record before the Board, which consists of the administrative record of the DAQ related to the application, review and issuance of the AO, the exhibits admitted and the testimony of the DAQ/SPC witnesses at the hearing is substantial evidence that the AO was properly issued under the existing federal and state laws and rules for the construction of coal-power plants and the Executive Secretary and the SPC are entitled to an Order affirming the October 12, 2004 Approval Order.

3. SCC failed to submit a single expert witness to substantiate any of their 14 allegations of error. The SCC hearsay evidence may not be used to substantiate a finding of fact of alleged error therefore, the Executive Secretary and SPC are entitled to an order affirming the October 12, 2004 Approval Order and dismissing with prejudice the SCC RFA.

ORDER

The SCC Request For Agency Action, dated 3/16/06 is denied and the Sevier Power Company Approval Order, dated 10/12/04 is affirmed.

CERTIFICATE OF DELIVERY

I hereby certify that a copy of the foregoing Sevier Power Company's **Closing Brief with attached Proposed Findings of Fact, Conclusions of Law and Order** was served on the persons below on this 22nd day of May, 2006 by U.S. Mail, postage prepaid:

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BEFORE THE UTAH AIR QUALITY BOARD

In Re: Approval Order – the Sevier Power Company, 270 MW Coal-Fired Power Plant, Sevier County Project Code: N2529-001 DAQE-AN2529001-04	**PACIFICORP'S POST-HEARING BRIEF REGARDING CLAIM # 3**

PacifiCorp, in its amicus status,[1] hereby submits this Post-Hearing Brief in the above captioned matter. This Post-Hearing Brief focuses exclusively on contesting Claim #3 asserted by the Sevier County Citizens for Clean Air and Water ("SCC"). Claim #3 asserts that:

> "*UDAQ failed to adequately consider the use of IGCC [integrated gasification combined cycle] both as a viable method of achieving BACT [best available control technology] and as a cost effective way to minimize emissions.*"

[1] PacifiCorp was granted amicus status in the Utah Air Quality Board's ("Board") Order of May 12, 2005. The Board, as reflected in the Minutes (Section VIII) of its July 6, 2005 meeting, specifically allowed for amicus parties such as PacifiCorp to "submit . . . post-hearing briefs." *Air Quality Board July Minutes 2005* at page 5.

As stated to the Board on numerous occasions throughout this proceeding, PacifiCorp's position is that, as a matter of law, the Board cannot require the consideration of IGCC as BACT for a proposed power plant simply because the proposed plant will use coal as fuel.

I. PROCEDURAL BACKGROUND

On October 12, 2004, the Utah Division of Air Quality ("UDAQ") issued an Approval Order ("AO") granting a Prevention of Significant Deterioration ("PSD") permit to the Sevier Power Company ("Sevier Power") to construct and operate a circulating fluidized bed ("CFB"), coal-fired power plant in Sigurd, Sevier County, Utah. On November 1, 2004, SCC filed its Request for Agency Action ("First RFA") with the Board contesting the AO. On March 16, 2005, SCC filed another document attempting to further contest the AO ("Second RFA"). In its Second RFA, SCC asserts fourteen separate claims, including Claim #3. On February 27, 2006, the Executive Secretary filed its Motion for Judgment on the Pleadings seeking dismissal of most of SCC's claims, including Claim #3. On March 20, 2006, PacifiCorp, in its amicus status, submitted its Reply to SCC's Opposition to the Executive Secretary's Motion for Judgment on the Pleadings ("PacifiCorp's Reply Brief.") PacifiCorp's Reply Brief supported the Executive Secretary's Motion for Judgment on the Pleadings in regard to SCC's Claim #3. On April 6, 2006, the Board voted to "defer" making a decision on the Executive Secretary's Motion for Judgment on the Pleadings in regard to Claim #3 until after receiving evidence on that issue at a future hearing. On May 10, 2006, the Board conducted a formal hearing under the Utah Administrative Procedures Act to "take evidence on questions of fact regarding issue . . . 3 . . . ." In its "Hearing Opening Statement" delivered at the May 10th hearing, the Board called for submittal of any post-hearing briefs by May 22, 2006.

II. CLAIM #3 SHOULD BE DISMISSED AS A MATTER OF LAW

PacifiCorp's Reply Brief contains detailed legal arguments in support of the Executive Secretary's request to dismiss SCC's Claim #3. PacifiCorp incorporates those arguments in full herein by reference, and summarizes them below for easy reference:

- UDAQ has implemented the "top-down" method for determining BACT; the first step of this "top-down" method is to identify all available control technologies for the proposed source.
- BACT is to be ascertained for the source *as proposed* by the air permit applicant.
- The BACT process does not require an applicant to *redefine* the proposed source as a means to lower air emissions (i.e., in this case, substitute one generating technology (IGCC) for another (CFB)). *See In re Spokane Regional Waste-to-Energy Applicant*, *PSD App. No. 88-12*, 1989 WL 266360, n.7 (EPA June 9, 1989) ("EPA has not required a PSD applicant to change the fundamental scope of its project.")
- The BACT definition requires consideration only of alternative "available control technologies" for the proposed source, not consideration of altogether different, alternative sources. *See In re Pennsauken County, New Jersey Resource Recovery Facility*, PSD Appeal No. 88-8, 1988 WL 249035 (EPA November 10, 1988).
- Established federal policy, recently affirmed by EPA, makes clear that the federal Clean Air Act (upon which the Utah Air Conservation Act is based) does not require consideration of IGCC in the circumstance currently before the Board or for any oth electric generating source proposing to use coal as fuel.
- UDAQ has already twice taken the position that the BACT requirement does require an applicant for a proposed source to consider using a completely di source as a means to reduce emissions.
- Even if IGCC were to be considered a control technology option rath SCC has not demonstrated that IGCC is *available* as a control techr Because IGCC cannot be considered as an "available" control tec definition it cannot be required as BACT.
- UCA §19-2-106 prohibits the Board from establishing or in rules in a manner more stringent than federal rules. As nc not require that IGCC be considered as BACT.
- A dramatic reinterpretation of existing state BACT IGCC in a BACT analysis would be tantamount t would constitute a fundamental change to existi

these are to be left to formal rulemaking or legislative proceedings to ensure full and fair public participation.

The issue underlying Claim #3 is purely a legal matter of statutory and regulatory interpretation. Although SCC has offered some vague factual evidence (non-expert testimony) on the subject of Claim #3, it has offered no supporting legal argument. Similarly, neither the Sierra Club nor the Grand Canyon Trust (together "Sierra Club"), the other parties that were allowed amicus status in this matter, has opted not to provide any legal argument to support of Claim #3. By the Board's Order of May 12, 2005, and as reflected in the Minutes (Section VIII) of the Board's July 6, 2005 meeting, the Sierra Club was given a full and unfettered opportunity to provide legal arguments via "briefs and oral argument.". For whatever reason, Sierra Club opted not to provide any legal argument (or any other argument or evidence). By its failure to weigh in on Claim #3, Sierra Club has waived and foregone its opportunity to address this legal issue.[2]

Because issue underlying Claim #3 is purely a legal matter, there is no need for the Board to consider any of the factual evidence offered at the May 10th hearing in order to resolve Claim #3. Because this legal issue will be resolved by interpretation of the regulatory BACT definition, testimony (either expert or lay) on this issue is not needed. That the Board chose to "defer" its decision on Claim #3 until after the May 10th hearing does not change the fact that Claim #3 is a

[2] The stage is now set for the Board to determine what it considers should be the State of Utah's policy on the this legal issue. The Board, the Executive Secretary, the actual parties, the amicus parties, and numerous other entities and individuals have devoted considerable time and resources in getting this legal issue to the point where it can now be resolved. Because the Sierra Club has chosen not to participate in the process for resolving this legal issue, Sierra Club should not hereafter be allowed to resurrect the resolved dispute in another context at some future date.

SCC's and Sierra Club's interests are exactly aligned on Claim #3. Sierra Club should not be allowed to "sit out" the very proceeding in which this important legal and policy issue may potentially be resolved only to ask the Board to revisit the same issue at some future date on the asserted basis that its interests were not the same as SCC's on this issue.

purely legal issue that should be decided by the Board as a matter of law and without regard to whatever factual evidence was presented at the May 10th hearing.

III. SCC DID NOT SUBMIT ANY CREDIBLE EVIDENCE REGARDING CLAIM #3

Even if the Board were to consider whatever evidence was submitted at the May 10th hearing in resolving Claim #3, SCC failed to offer *any* evidence whatsoever in support of its position. The *only* evidence offered on the subject was that submitted by the Executive Secretary in support of its position that Claim #3 should be dismissed.

SCC was given every opportunity at the May 10th hearing to submit evidence in order to persuade the Board to consider SCC's position on Claim #3. SCC offered no expert witness and no expert testimony relating to Claim #3. Instead, SCC simply submitted the testimony of two members of its group, Mr. James Kennon and Mr. Dick Cuminsky.[3] Neither Mr. Kennon nor Mr. Cuminsky offered themselves as experts in the field of IGCC technology or the BACT process; in fact, neither professed any experience with or expertise in IGCC facilities, emission controls or even power plants in general, but instead simply offered their personal lay opinions. Upon questioning by the Board, Mr. Kennon admitted that many members of SCC were opposed the use of any electric generating technology at the proposed site, whether IGCC, CFB or otherwise. Those SCC members simply are opposed to any power plant – period!

In contrast, the Executive Secretary's expert witness, Mr. Colin Campbell, testified to his extensive experience regarding the BACT process, and whether it required consideration of

[3] SCC also submitted two notebooks of materials (Exhibits P1 and P2 as hearing exhibits). The notebooks contained materials from a variety of sources, some cited as to origin and some not, generally discussing IGCC facilities and the application of IGCC in the BACT process. None of the materials qualify as "relevant evidence" and all of the materials constitute "hearsay" without any applicable exceptions to allow their admissibility. *See* Utah Rules of Evidence, Rule 401 and Article VIII.

IGCC for a proposed electric generating source using coal as fuel. Mr. Campbell offered compelling testimony in support of dismissing Claim #3, including the following:

- IGCC need not be considered in the BACT process because requiring IGCC would fundamentally redefine the proposed source.
- An IGCC facility is significantly more complex than the proposed CFB facility.
- Between the coal handling equipment and the emissions stack, there is no equipment in common between an IGCC facility and a CFB facility.
- IGCC facilities are not inherently lower emitting than CFB facilities.
- Only two IGCC facilities are in operation in the U.S. and no new IGCC facilities are under construction.
- IGCC facilities have higher capital costs, even without the redundancy necessary to keep availability high.
- IGCC facilities are 25-30% more expensive, and are less efficient at higher altitudes than at sea level.

Even if the Board were to consider the factual evidence offered at the May 10th hearing, the absence of any expert testimony from SCC in support of Claim #3, coupled with the compelling expert testimony offered by Mr. Campbell against Claim #3, compel the conclusion that Claim #3 should be dismissed.

IV. PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

As requested by the Board, PacifiCorp proposes the following Findings of Fact and Conclusions of Law to be adopted by the Board in dismissing Claim #3.

A. Findings of Fact

1. Substituting an IGCC facility for the CFB facility as proposed by Sevier Power would fundamentally redefine the proposed source.

2. SCC has not established that IGCC is an "available" control technology option, *i.e.*, a control technology or technique with a practical potential for application to the emission unit. *See* EPA New Source Review Workshop Manual ("NSR Manual"), at B.11.

More specifically, SCC has not established that IGCC is a technology that has been applied to (or permitted for) full scale operations. *Id.*

3. An IGCC facility is significantly more complex than the CFB facility as proposed by Sevier Power.

4. An IGCC facility and the CFB facility as proposed by the Sevier Power have no equipment in common other then coal handling equipment and the emissions stack which both facilities would require.

5. IGCC facilities are not inherently lower emitting than the CFB facility as proposed by Sevier Power.

6. There are only two IGCC facilities operating in the United States, the Polk facility in Florida, and the Wabash facility in Indiana.

7. From the outset both the Polk and Wabash facilities were proposed and permitted as IGCC facilities; neither facility was first proposed as a different source and then changed to IGCC as a result of the BACT process.

8. An IGCC facility would have higher capital and operating costs, and would operate at a lower efficiency than the CFB facility as proposed by Sevier Power.

B. **Conclusions of Law**

1. In Utah the appropriate method for determining BACT is the "top-down" method; the first step of the "top-down" method is to identify all available control technologies for the proposed source.

2. Requiring an applicant to include IGCC in its BACT analysis for a CFB facility as proposed by Sevier Power is contrary to the plain language of the BACT definition.

3. Requiring an applicant to include IGCC in its BACT analysis for a CFB facility as proposed by Sevier Power is contrary to the established federal policy whereby the applicant proposes the particular type of source, and then through the BACT analysis the applicant identifies available control technologies for the particular type of source that the applicant has proposed.

4. Requiring an applicant to include IGCC in its BACT analysis for a CFB facility as proposed by Sevier Power is contrary to EPA's recent reaffirmation of federal policy. *See* December 13, 2005 letter from Stephen D. Page, Director of EPA's Office of Air Quality, Planning and Standards ("As noted in prior EPA decisions and guidance, EPA does not consider the BACT requirement as a means to redefine the basic design of the source or change the fundamental scope of the project when considering available control alternatives.").

5. Requiring an applicant to include IGCC in its BACT analysis for a CFB facility as proposed by Sevier Power is contrary to UDAQ's established policy. *See* September 27, 2004 Memorandum to Sevier Power Plant File, at 30; October 14, 2004 Memorandum to

IPSC File, at 4. Administrative agencies must generally follow their own precedents or interpretations, or explain why they have departed from them. Davis & Pierce Treatise, §11.5; *Atchison, Topeka & Santa Fe R. v. Wichita Bd. of Trade*, 412 U.S. 800, 808 (1973).

6. Requiring an applicant to include IGCC in its BACT analysis for a CFB facility as proposed by Sevier Power would create a new state rule that would be more stringent than the long-established federal policy; such a rule would constitute a violation of Utah Code Ann. § 19-2-106, which prohibits state agencies from making any rule "for the purpose of administering a program under the federal Clean Air Act" that would be "more stringent than the corresponding federal regulations which address the same circumstances."

7. The Executive Secretary correctly interpreted and applied the definition of BACT as contained in Utah Administrative Rule 307-101-2(4) by not requiring the consideration of IGCC technology to the CFB facility as proposed by the Sevier Power Company.

Submitted this 22nd day of May, 2006.

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CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of May, 2006, the foregoing **PACIFICORP'S POST-HEARING BRIEF REGARDING CLAIM #3**, was mailed via U.S. First Class Mail, as indicated to the following:

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